US009741078B2

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Ehrhart

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(54) **DASHBOARD INTERFACE, PLATFORM, AND ENVIRONMENT FOR AUTOMATED NEGOTIATION, BENCHMARKING, COMPLIANCE, AND AUDITING**

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(73) Assignee: **AON SINGAPORE CENTRE FOR INNOVATION, STRATEGY AND MANAGEMENT PTE., LTD.**, Singapore (SG)

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(22) Filed: **Jun. 30, 2016**

(65) **Prior Publication Data**

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Related U.S. Application Data

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(51) **Int. Cl.**

G06Q 40/00	(2012.01)
G06Q 40/08	(2012.01)
G06Q 40/04	(2012.01)
G06F 3/0482	(2013.01)
G06F 17/24	(2006.01)

(52) **U.S. Cl.**
CPC ***G06Q 40/08*** (2013.01); ***G06F 3/0482*** (2013.01); ***G06F 17/248*** (2013.01); ***G06Q 40/04*** (2013.01)

(58) **Field of Classification Search**
CPC G06Q 10/00; G06Q 20/00; G06Q 30/00; G06Q 40/00
USPC 705/3–44
See application file for complete search history.

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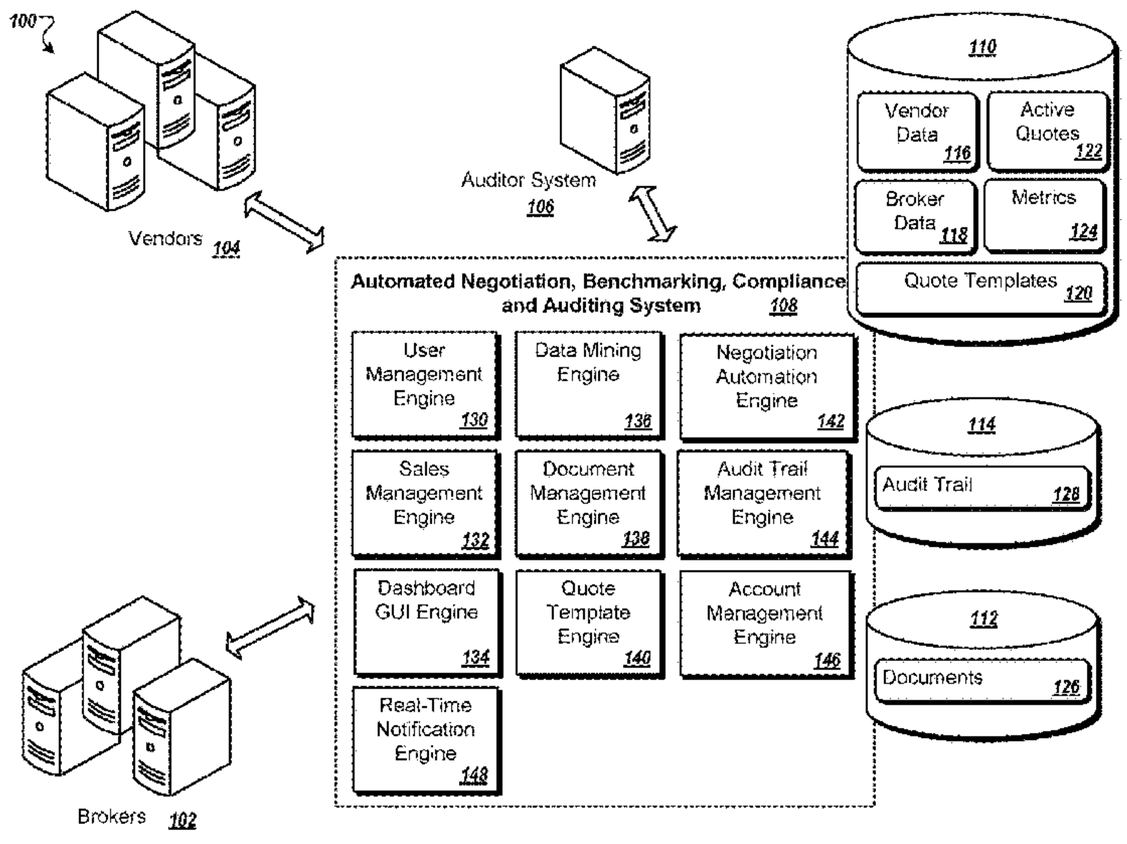
(Continued)

Primary Examiner — Frantzy Poinvil
(74) *Attorney, Agent, or Firm* — Gardella Grace P.A.

(57) **ABSTRACT**

The present application describes dashboard user interfaces, methods, systems, and transactional environments for automated reinsurance negotiation, benchmarking, compliance, and auditing. During the automated process, in some embodiments, a quote template engine aids the user in customizing quote requests and follow-on quote information based upon learned parameters used in past negotiations, a real-time notification engine alerts parties to the negotiation when new information is available and/or automatically presents updating information for user review, and an audit trail management engine tracks information shared during the negotiation and stores the steps of the negotiation for later audit review. Further, a data mining engine may analyze the audit trail information to identify negotiation metrics related to the parties participating in the transactional environment.

13 Claims, 23 Drawing Sheets



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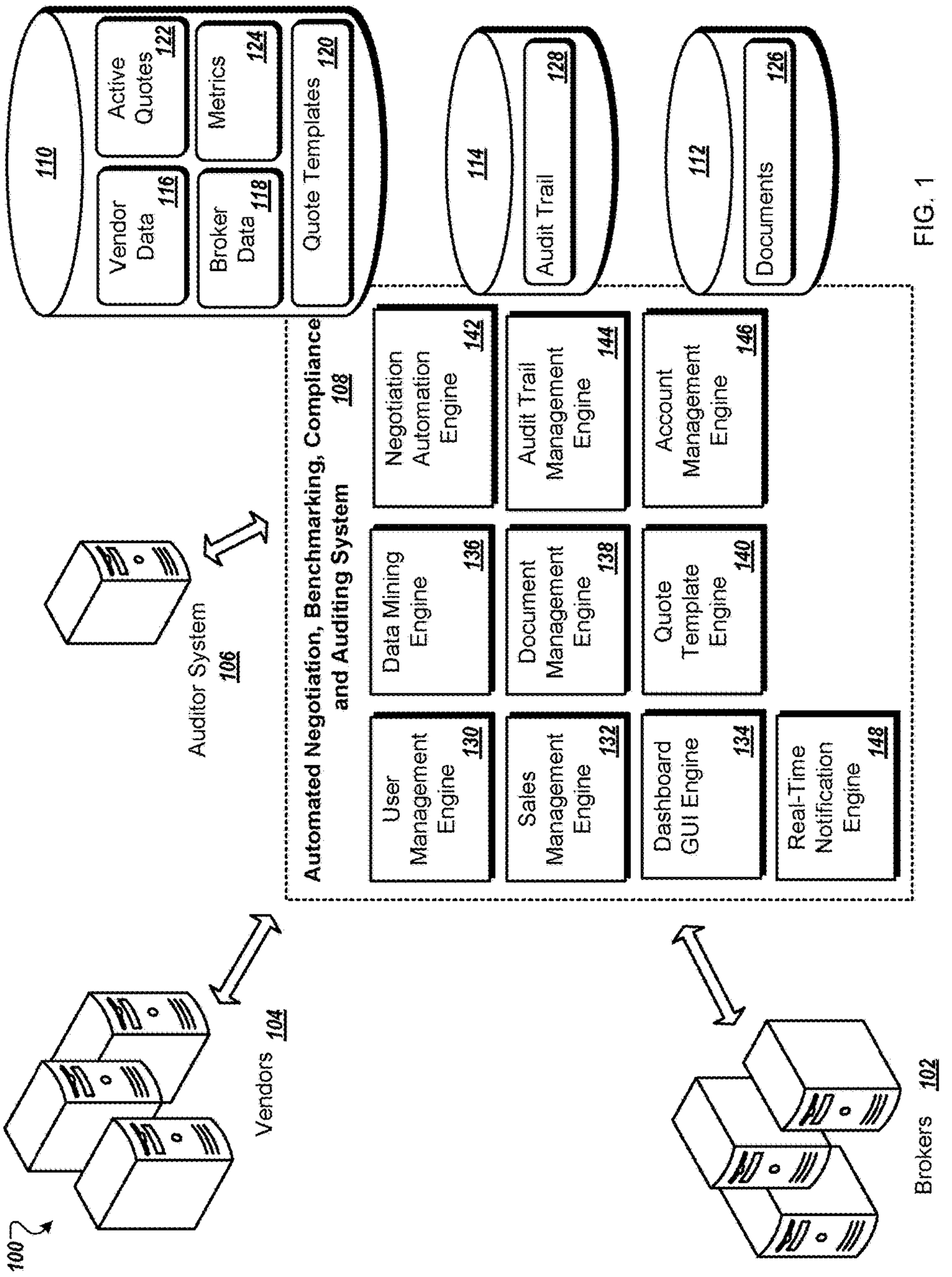
110
Vendor Data 116
Active Quotes 122
Broker Data 118
Metrics 124
Quote Templates 120
114
Audit Trail 128
112
Documents 126
Automated Negotiation, Benchmarking, Compliance and Auditing System 108
User Management Engine 130
Data Mining Engine 136
Negotiation Automation Engine 142
Sales Management Engine 132
Document Management Engine 138
Audit Trail Management Engine 144
Dashboard GUI Engine 134
Quote Template Engine 140
Account Management Engine 146
Real-Time Notification Engine 148
Auditor System 106
Vendors 104
Brokers 102
100

FIG. 1

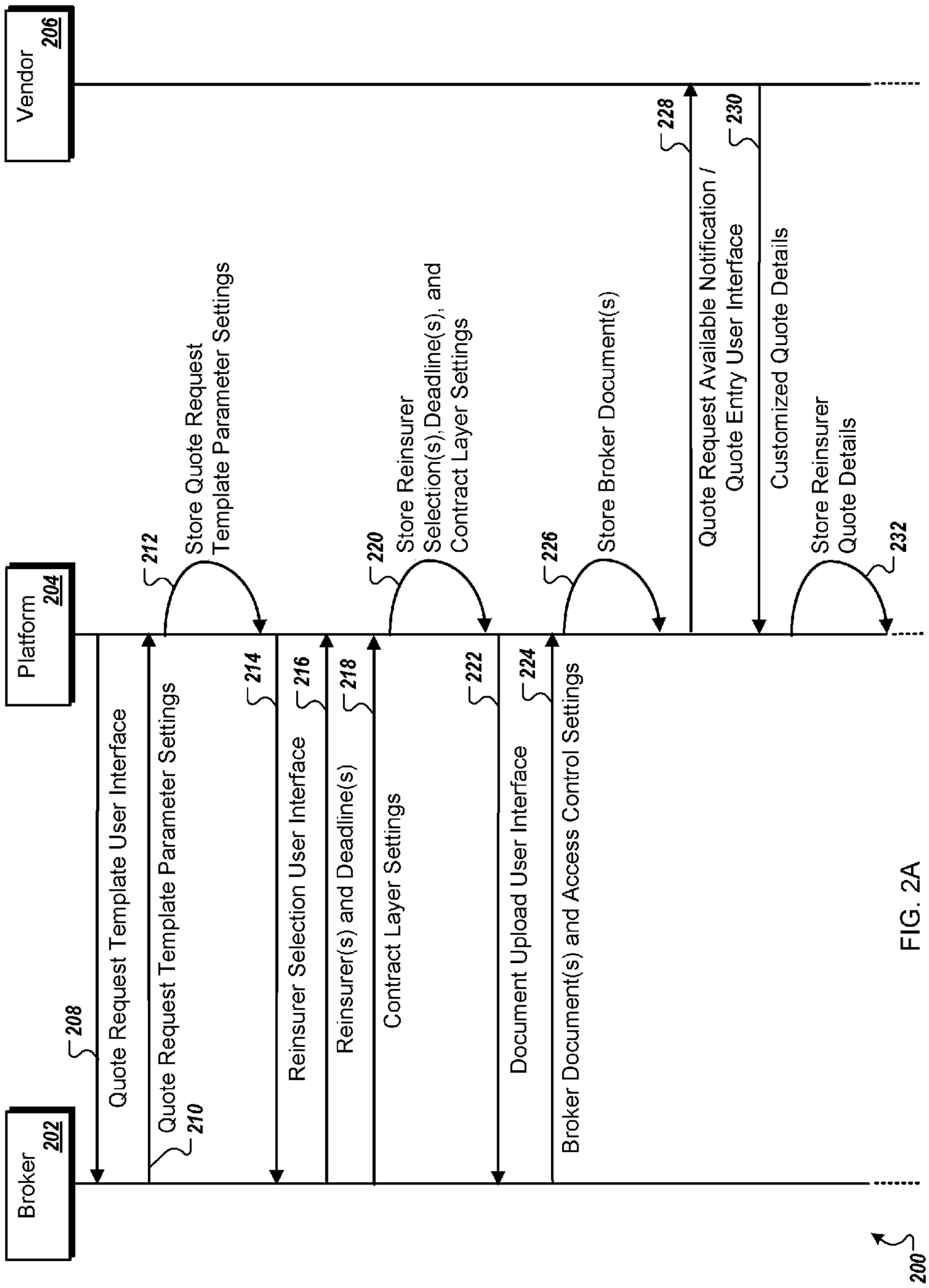
Broker 202
Platform 204
Vendor 206
208
Quote Request Template User Interface
210
Quote Request Template Parameter Settings
212
Store Quote Request Template Parameter Settings
214
Reinsurer Selection User Interface
216
Reinsurer(s) and Deadline(s)
218
Contract Layer Settings
220
Store Reinsurer Selection(s), Deadline(s), and Contract Layer Settings
222
Document Upload User Interface
224
Broker Document(s) and Access Control Settings
226
Store Broker Document(s)
228
Quote Request Available Notification / Quote Entry User Interface
230
Customized Quote Details
232
Store Reinsurer Quote Details
200

FIG. 2A

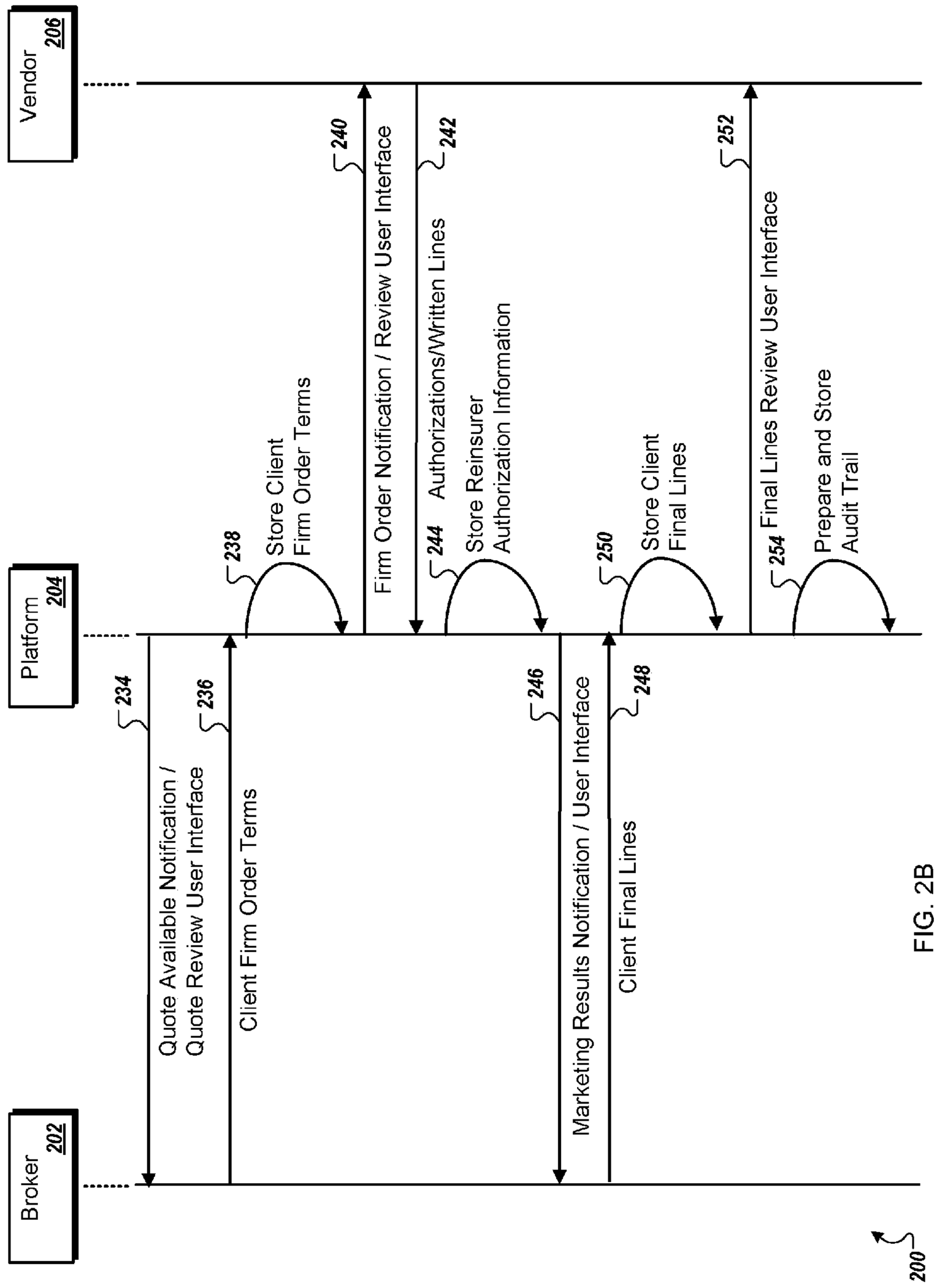
Broker 202
Platform 204
Vendor 206
234 Quote Available Notification / Quote Review User Interface
236 Client Firm Order Terms
238 Store Client Firm Order Terms
240 Firm Order Notification / Review User Interface
242 Authorizations/Written Lines
244 Store Reinsurer Authorization Information
246 Marketing Results Notification / User Interface
248 Client Final Lines
250 Store Client Final Lines
252 Final Lines Review User Interface
254 Prepare and Store Audit Trail
200

FIG. 2B

300

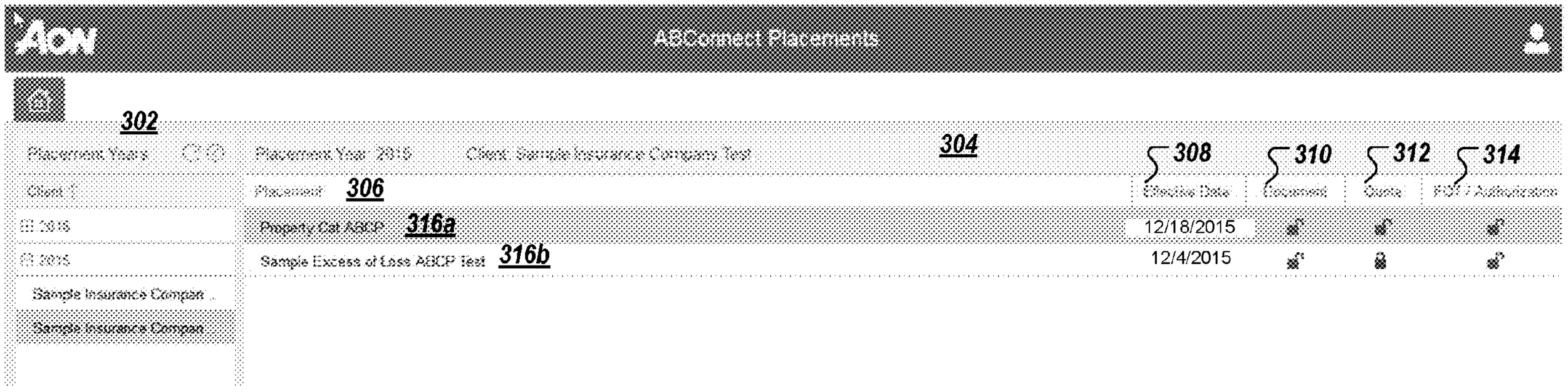
AON
ABConnect Placements
302
Placement Years
Placement Year: 2015
Client: Sample Insurance Company Test
304
Client
Placement
306
308
Effective Date
310
Document
312
Quote
314
FDF / Authorization
2015
Property Cat ABCP
316a
12/18/2015
(C) 2015
Sample Excess of Loss ABCP Test
316b
12/4/2015
Sample Insurance Compan...
Sample Insurance Company

FIG. 3A

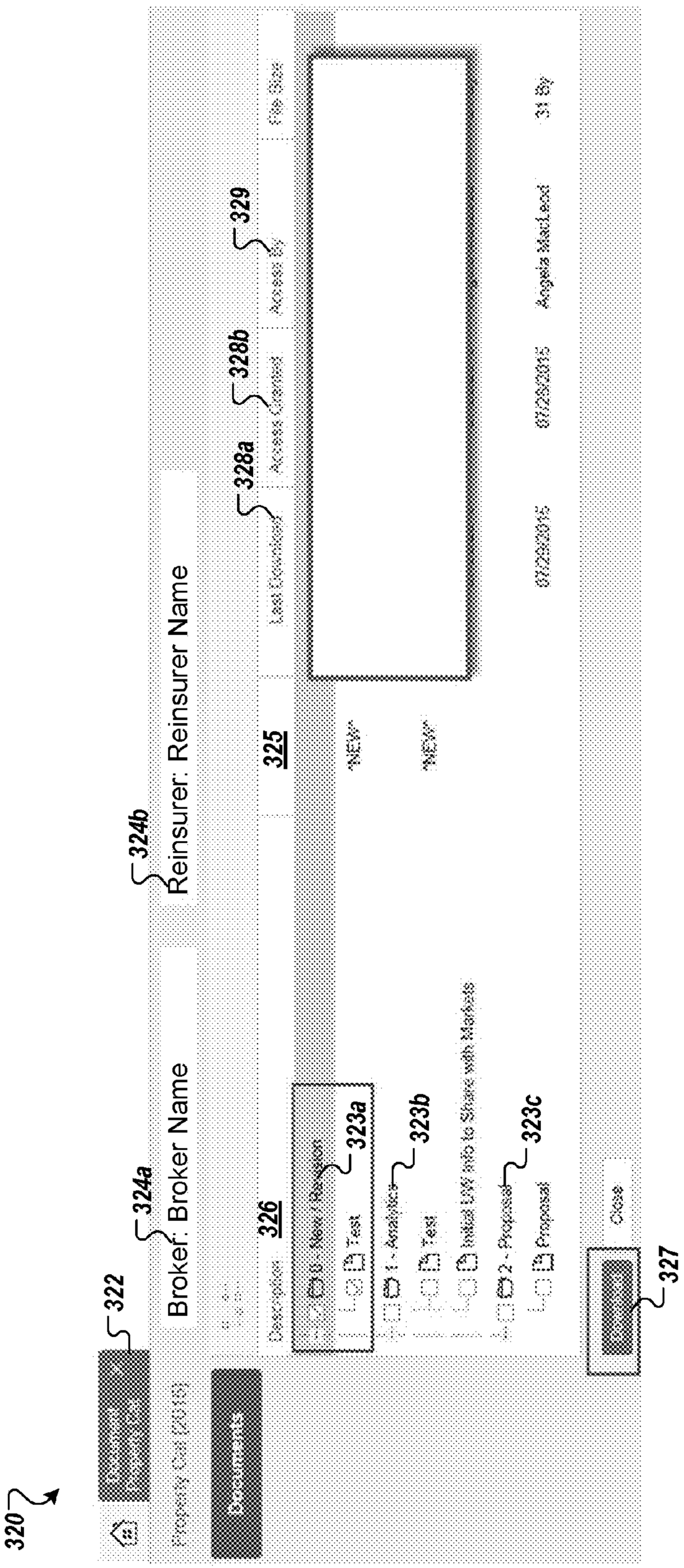
320
322
324a
Broker: Broker Name
324b
Reinsurer: Reinsurer Name
326
323a
323b
323c
327
325
328a
328b
329
Close

FIG. 3B

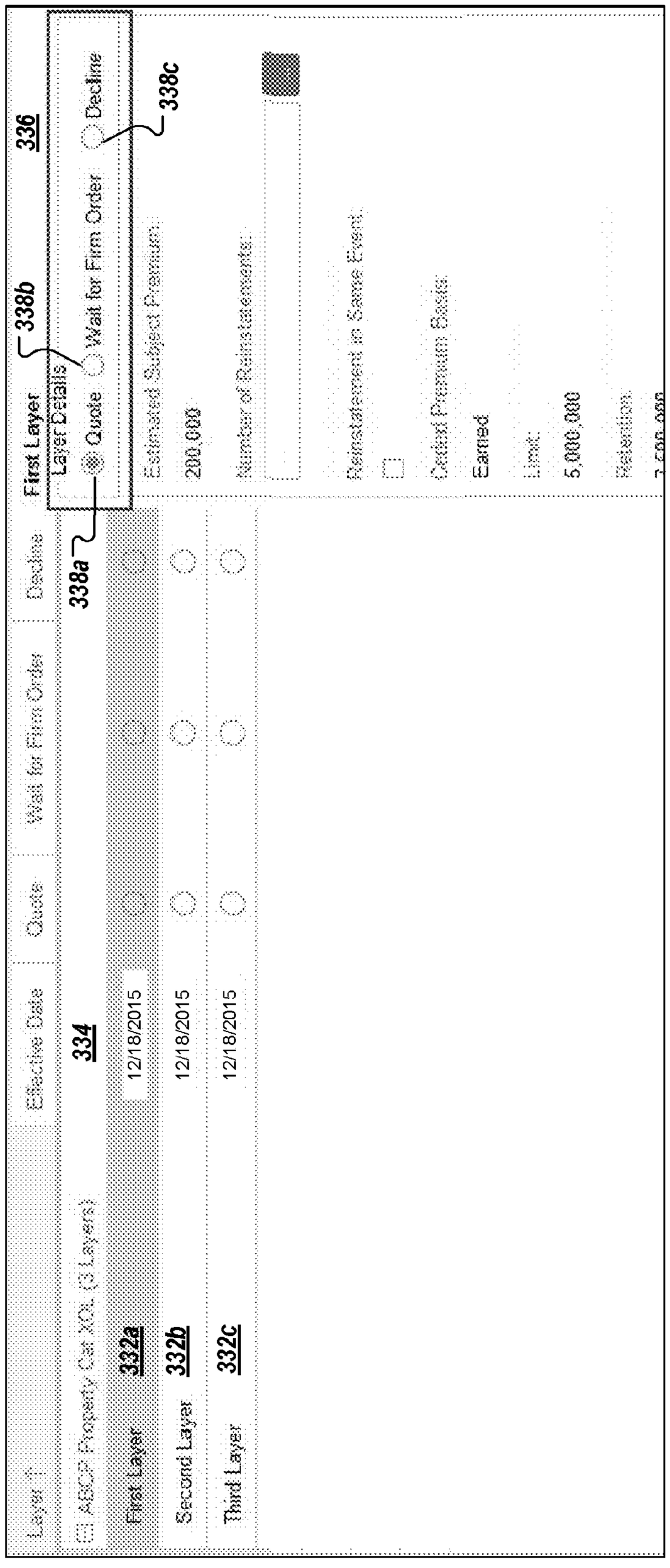
330
334
336
338a
338b
338c
Effective Date
Quote
Wait for Firm Order
Decline
12/18/2015
12/18/2015
12/18/2015
First Layer
Layer Details
Quote
Wait for Firm Order
Decline
Estimated Subject Premium:
200,000
Number of Reinstatements:
Reinstatement in Same Event:
Ceded Premium Basis:
Earned
Limit:
5,000,000
Retention:
ABCP Property Cat XOL (3 Layers)
First Layer 332a
Second Layer 332b
Third Layer 332c

FIG. 3C

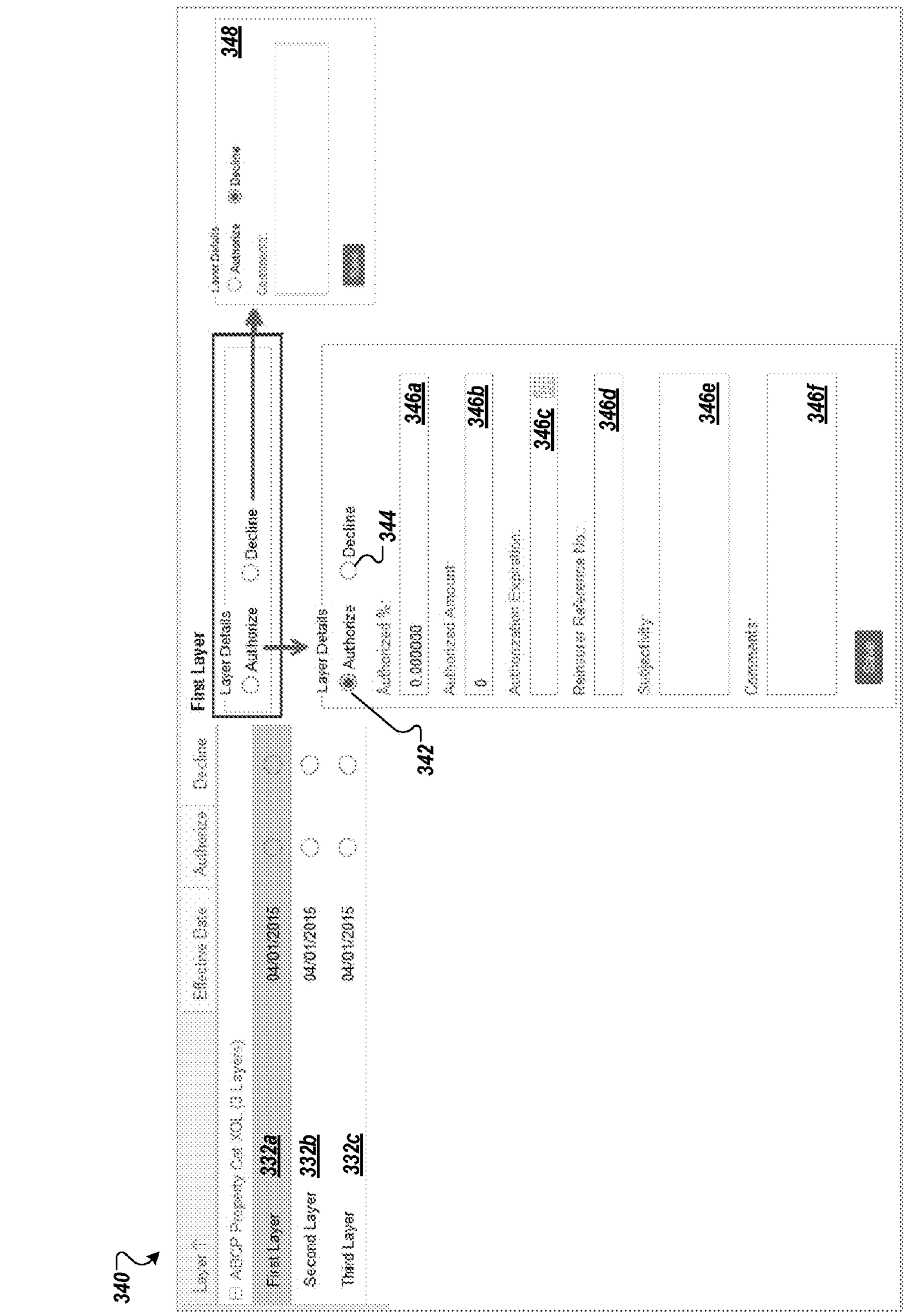
340
348
Authorize
Decline
First Layer
Layer Details
Authorize
Decline
342
344
Authorized By:
0.000000
346a
Authorized Amount:
0
346b
Authorization Expiration:
346c
Response Reference No.:
346d
Subjectivity:
346e
Comments:
346f
Layer #
Effective Date
ABCP Property Cat XOL (3 Layers)
First Layer 332a 04/01/2015
Second Layer 332b 04/01/2015
Third Layer 332c 04/01/2015

FIG. 3D

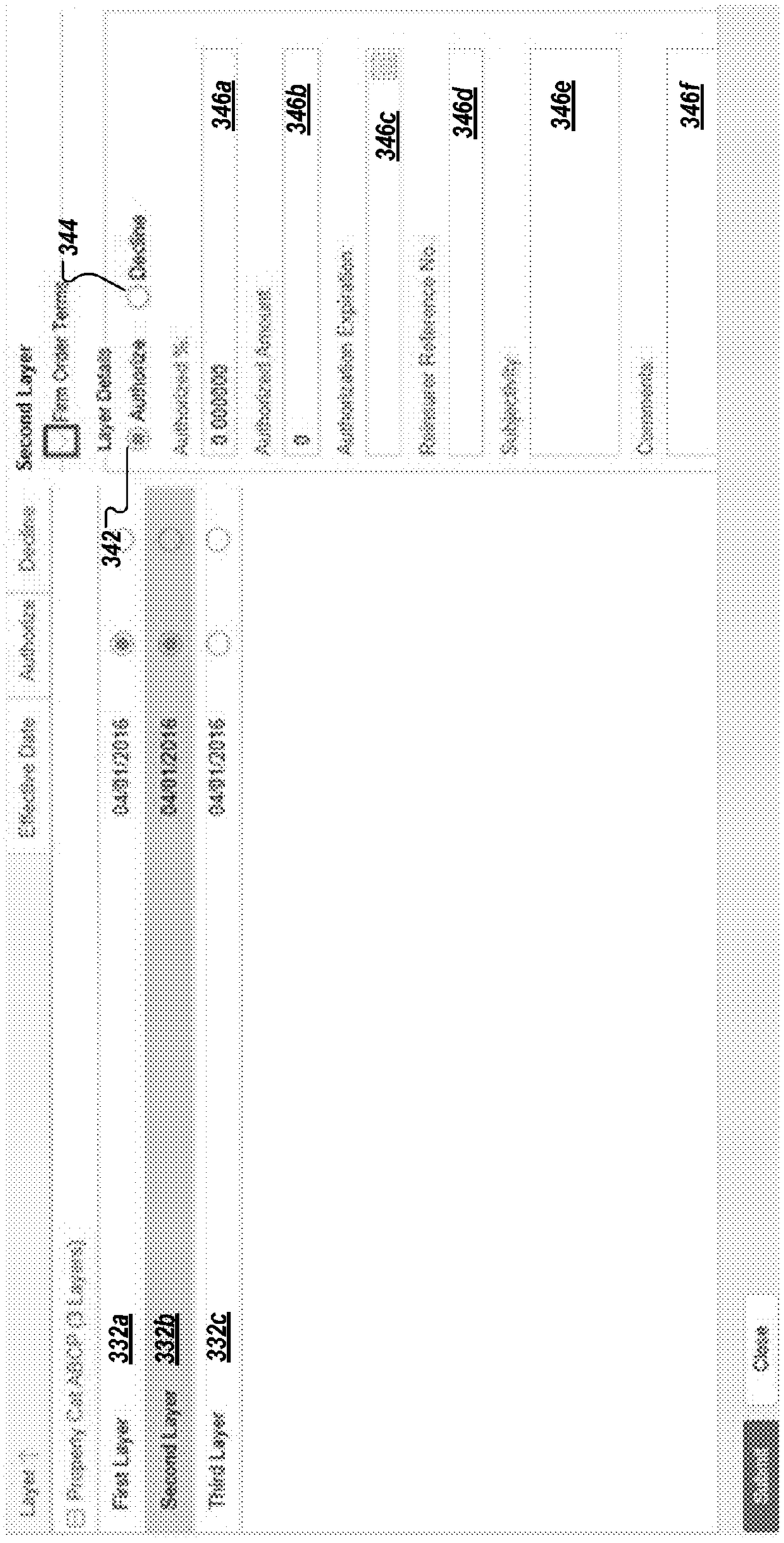
340
Layer #
Property Can Accept (0 Level)
First Layer
332a
Second Layer
332b
Third Layer
332c
Clone
344
342
Second Layer
Free Order Terms
Layer Order
Authorize
Effective Date
Authorize
Decline
04/01/2016
04/01/2016
04/01/2016
346a
346b
346c
346d
346e
346f
Authorized Amount
Authorized Amount
Authorization Expiration
Reserve Authorization
Signature
Comment

FIG. 3E

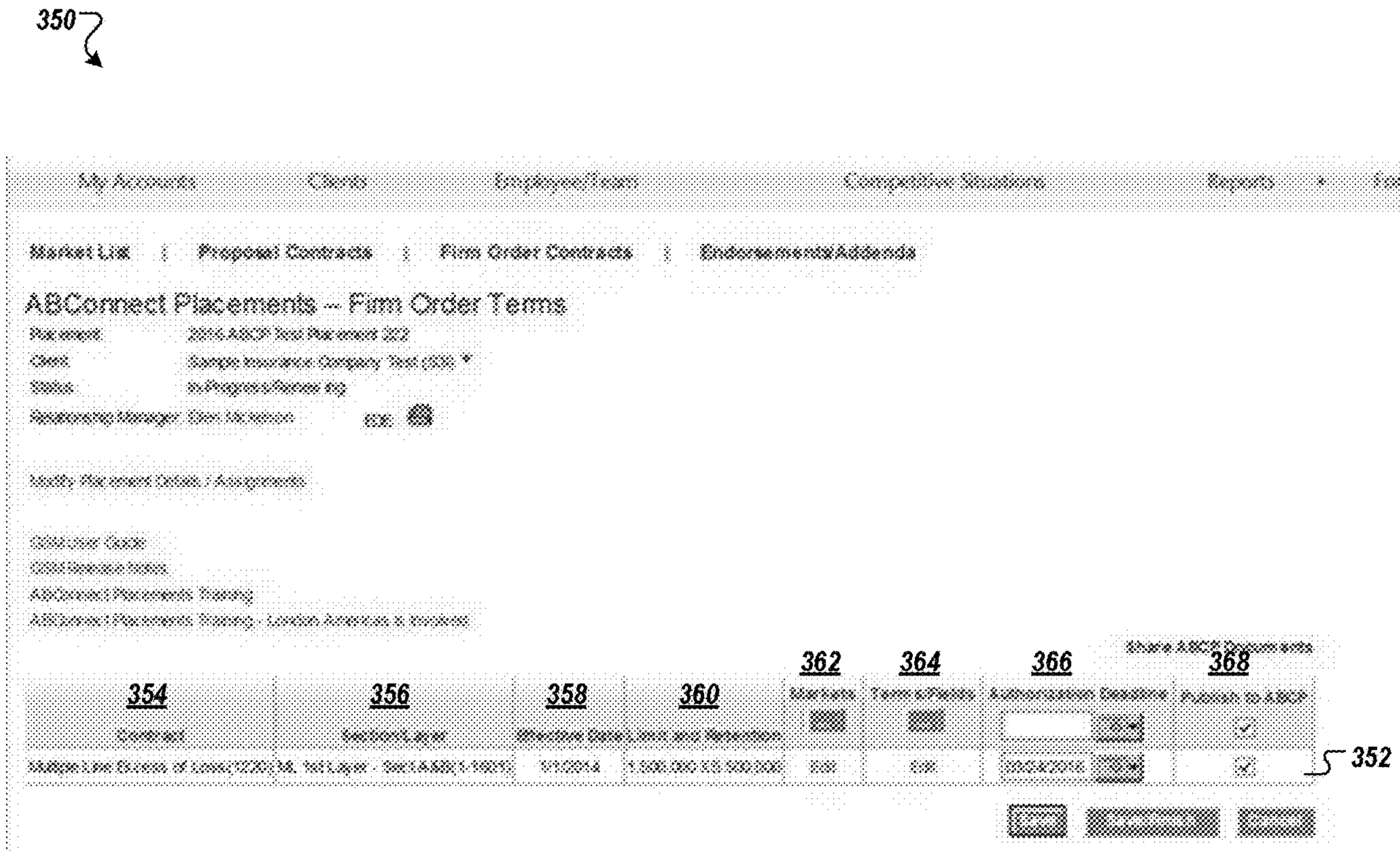
350
My Accounts
Clients
Employee Team
Competitive Situations
Reports
Forecast
Budget
Market List
Proposal Contracts
Firm Order Contracts
Endorsements/Addenda
ABConnect Placements -- Firm Order Terms
354
356
358
360
362
364
366
368
352

FIG. 3F

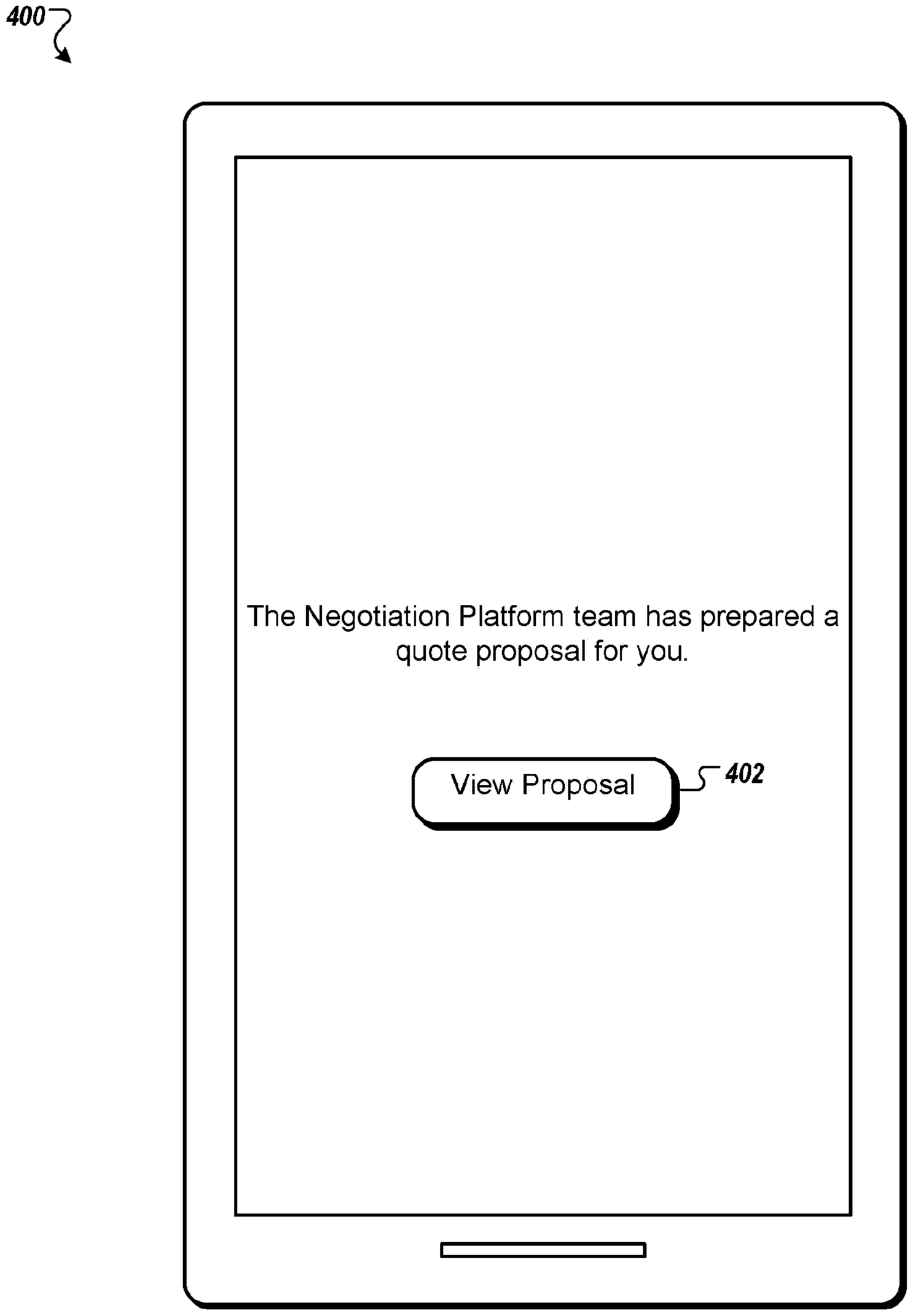
400
The Negotiation Platform team has prepared a quote proposal for you.
View Proposal
402

FIG. 4

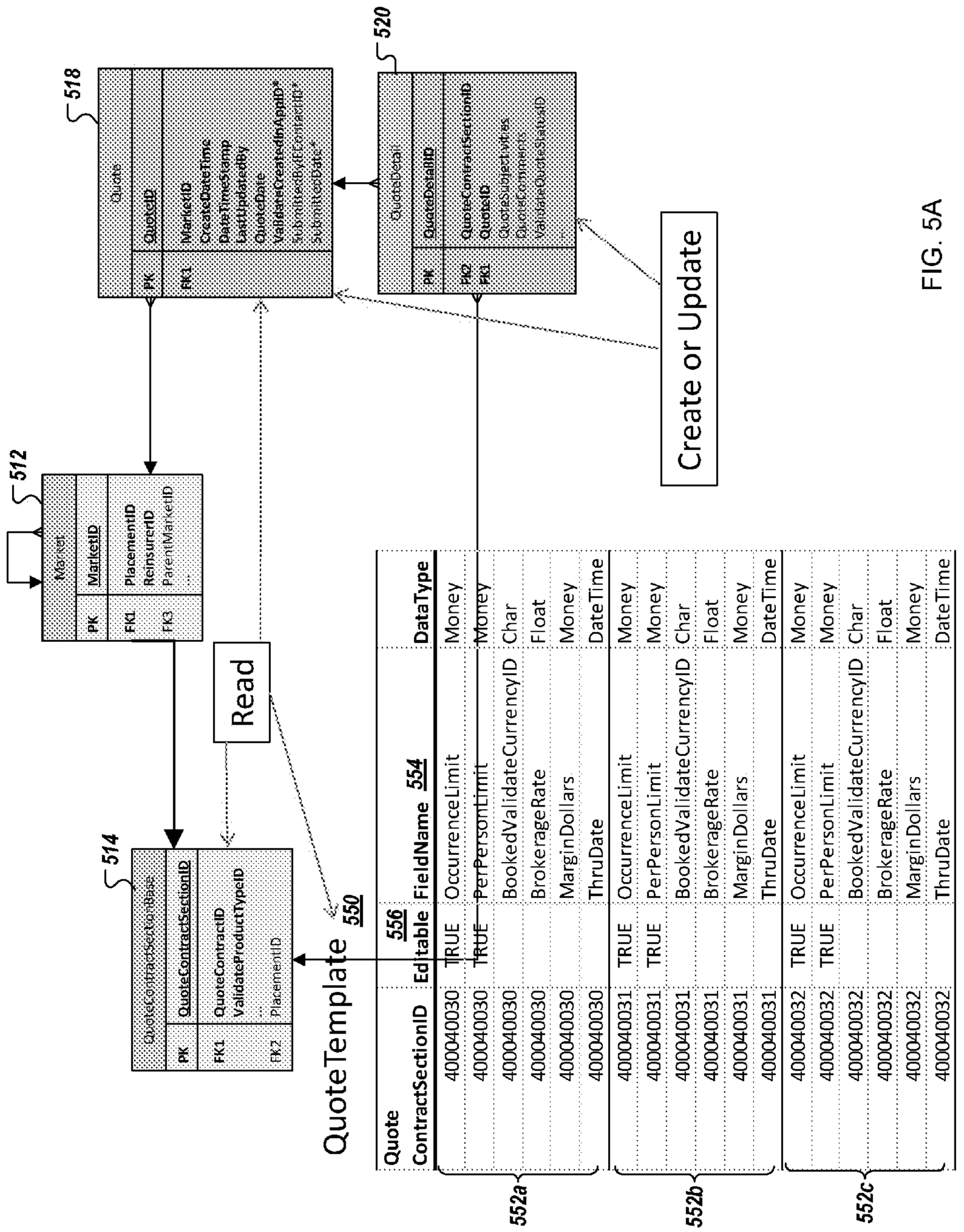
518
Quote
PK
QuoteID
FK1
MarketID
CreateDateTime
DateTimeStamp
LastUpdatedBy
QuoteDate
ValidateCreatedInAppID*
SubmittedByIFContactID*
SubmittedDate*
520
QuoteDetail
PK
QuoteDetailID
FK2
QuoteContractSectionID
FK1
QuoteID
QuoteSubjectivities
QuoteComments
ValidateQuoteStatusID
Update
Create or
512
Market
PK
MarketID
FK1
PlacementID
ReinsurerID
FK3
ParentMarketID
Read
514
QuoteContractSectionBase
PK
QuoteContractSectionID
FK1
QuoteContractID
ValidateProductTypeID
FK2
PlacementID
550
QuoteTemplate
Quote
ContractSectionID
556
Editable
554
FieldName
DataType
552a
552b
552c

FIG. 5A

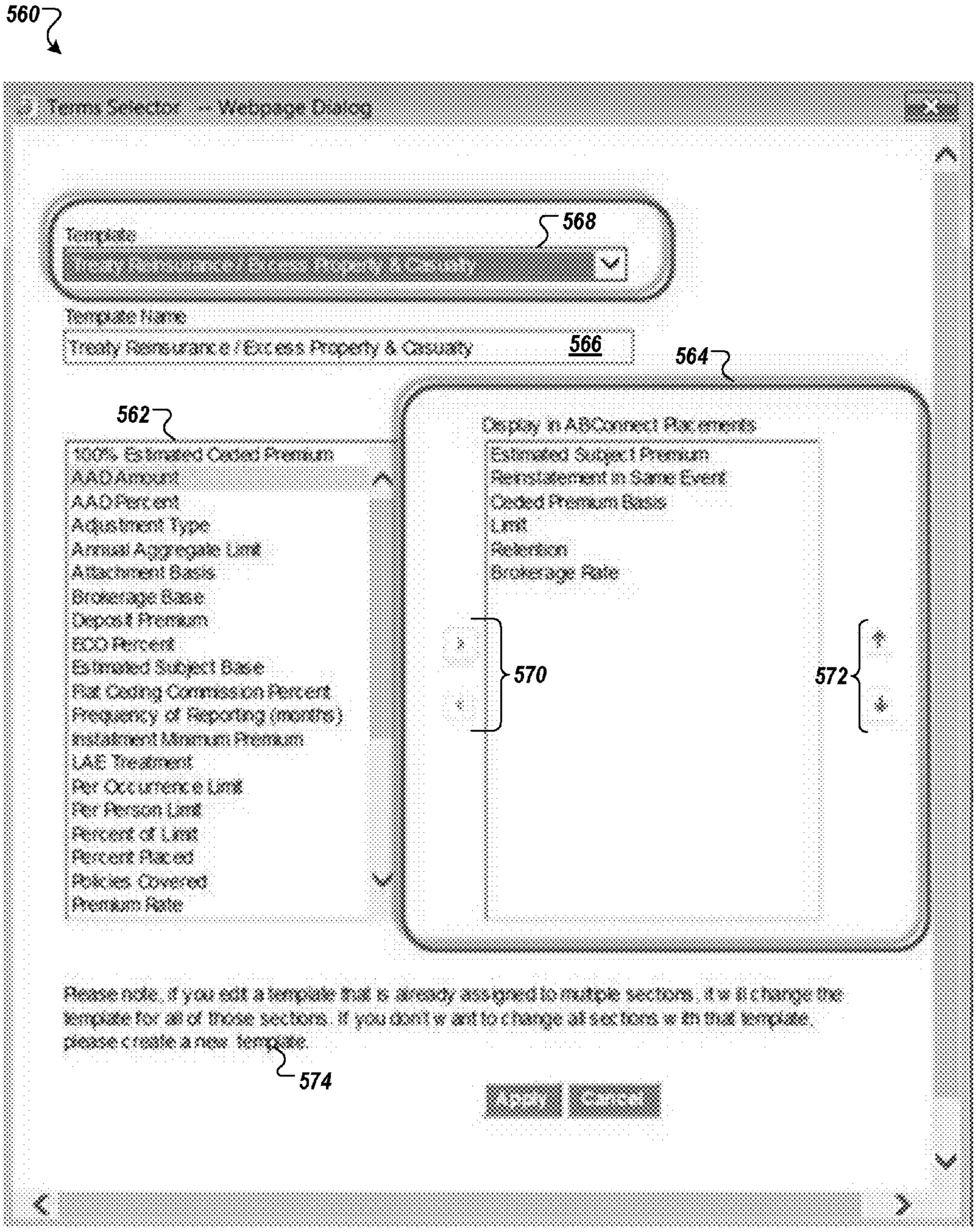
560
Terms Selector — Webpage Dialog
568
Template
Template Name
Treaty Reinsurance / Excess Property & Casualty
566
564
562
100% Estimated Ceded Premium
AAD Amount
AAD Percent
Adjustment Type
Annual Aggregate Limit
Attachment Basis
Brokerage Base
Deposit Premium
ECO Percent
Estimated Subject Base
Flat Ceding Commission Percent
Frequency of Reporting (months)
Instalment Minimum Premium
LAE Treatment
Per Occurrence Limit
Per Person Limit
Percent of Limit
Percent Placed
Policies Covered
Premium Rate
Display in ABConnect Placements
Estimated Subject Premium
Reinstatement in Same Event
Ceded Premium Basis
Limit
Retention
Brokerage Rate
570
572
Please note, if you edit a template that is already assigned to multiple sections, it will change the template for all of those sections. If you don't want to change all sections with that template, please create a new template.
574

FIG. 5B

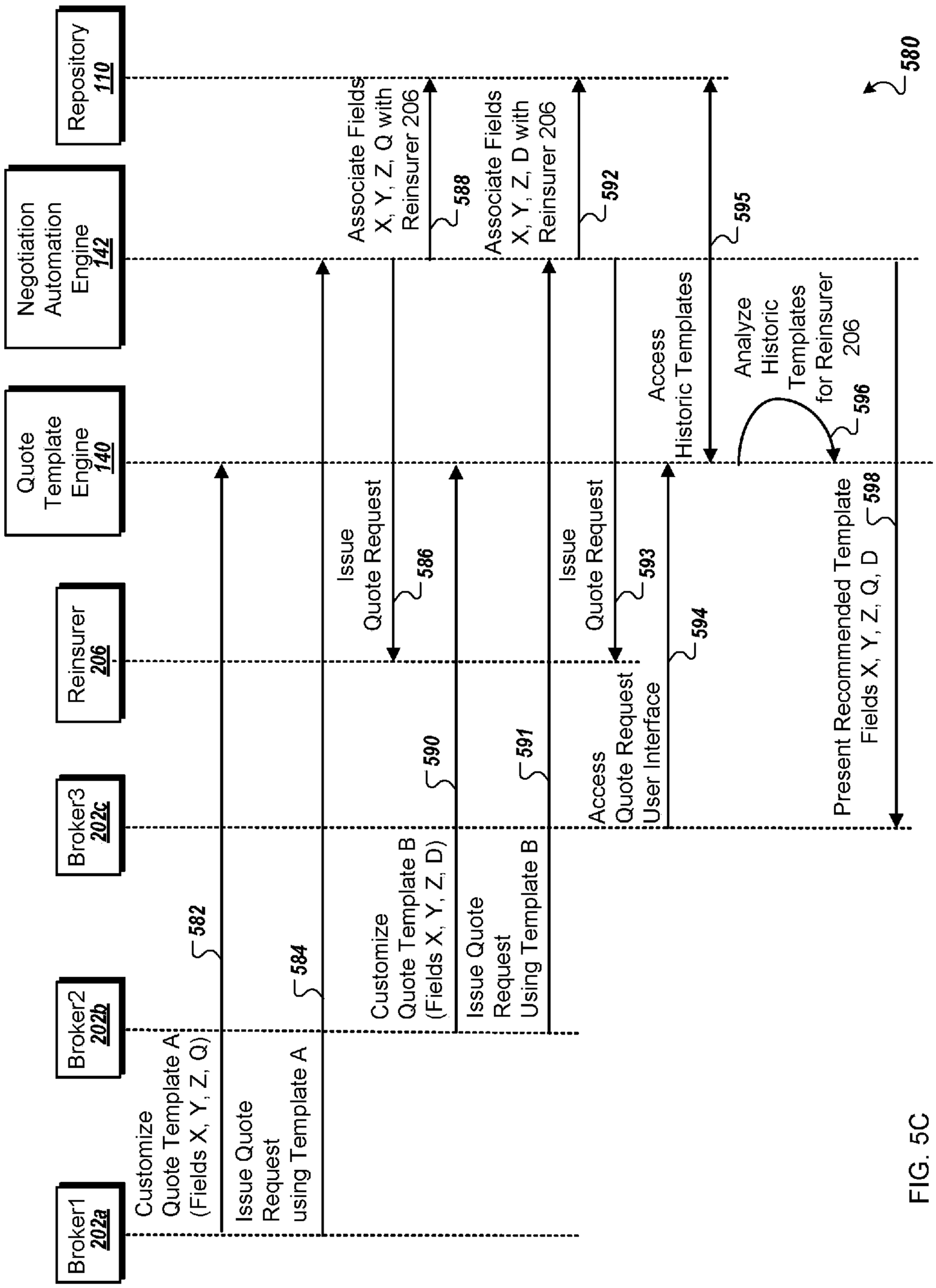
Broker3 202c
Reinsurer 206
Quote Template Engine 140
Negotiation Automation Engine 142
Repository 110
580
Broker2 202b
Broker1 202a
Customize Quote Template A (Fields X, Y, Z, Q)
582
Issue Quote Request using Template A
584
Issue Quote Request
586
Customize Quote Template B (Fields X, Y, Z, D)
590
Issue Quote Request
591
Associate Fields X, Y, Z, Q with Reinsurer 206
588
Associate Fields X, Y, Z, D with Reinsurer 206
592
Issue Quote Request
593
Access Quote Request User Interface
594
Access Historic Templates
595
Analyze Historic Templates for Reinsurer 206
596
Present Recommended Template Fields X, Y, Z, Q, D
598

FIG. 5C

600

QuoteContractSectionID	Editable	FieldName	DataType	QuoteContractSection 604a	Displayed 608
4000040030	TRUE	OccurrenceLimit	Money	115000	115000
4000040030	TRUE	PerPersonLimit	Money	20000	20000
4000040030		ValidateBusinessSegmentID	Char	9	Workers Co
4000040030		BrokerageRate	Float	2.50%	2.50%
4000040030		MarginDollars	Money	55000	55000
4000040030		ThruDate	DateTime	12/31/2015	12/31/2015
4000040031	TRUE	OccurrenceLimit	Money	604b	
4000040031	TRUE	PerPersonLimit	Money		
4000040031		ValidateBusinessSegmentID	Char	9	Workers Co
4000040031		BrokerageRate	Float	2.50%	2.50%
4000040031		MarginDollars	Money	10000	10000
4000040031		ThruDate	DateTime	12/31/2015	12/31/2015

606a

606b

ValidateBusinessSegment

QuoteContractSection 602

QuoteTemplate 550

FIG. 6A

610

Quote ContractSectionID	Editable	FieldName	DataType	Quote ContractSection	Quote A Not Submitted 612	
400040030	TRUE	OccurrenceLimit	Money	115000	125000	612a
400040030	TRUE	PerPersonLimit	Money	20000	25000	612b
400040030		ValidateBusinessSegmentID	Char	9		
400040030		BrokerageRate	Float	2.50%		
400040030		MarginDollars	Money	55000		
400040030		ThruDate	DateTime	12/31/2015		
400040031	TRUE	OccurrenceLimit	Money		12500	612c
400040031	TRUE	PerPersonLimit	Money			612d
400040031		ValidateBusinessSegmentID	Char	9		
400040031		BrokerageRate	Float	2.50%		
400040031		MarginDollars	Money	10000		
400040031		ThruDate	DateTime	12/31/2015		

FIG. 6B

620

Quote ContractSectionID	Editable	FieldName	DataType	Quote ContractSection	Quote A Not Submitted	
400040030	TRUE	OccurrenceLimit	Money	115000	125000	612a
400040030	TRUE	PerPersonLimit	Money	20000	25000	612b
400040030		ValidateBusinessSegmentID	Char	9		
400040030		BrokerageRate	Float	2.50%		
400040030		MarginDollars	Money	55000		
400040030		ThruDate	DateTime	12/31/2015		
400040031	TRUE	OccurrenceLimit	Money		12500	612c
400040031	TRUE	PerPersonLimit	Money		5000	612d
400040031		ValidateBusinessSegmentID	Char	9		
400040031		BrokerageRate	Float	2.50%		
400040031		MarginDollars	Money	10000		
400040031		ThruDate	DateTime	12/31/2015		

FIG. 6C

630

Quote ContractSectionID	Editable	FieldName	DataType	Quote ContractSection	Quote A Submitted	Displayed
400040030	TRUE	OccurrenceLimit	Money	115000	125000	125000
400040030	TRUE	PerPersonLimit	Money	20000	25000	25000
400040030		ValidateBusinessSegmentID	Char	9		Workers Co
400040030		BrokerageRate	Float	2.50%		2.50%
400040030		MarginDollars	Money	55000		55000
400040030		ThruDate	DateTime	12/31/2015		12/31/2015
400040031	TRUE	OccurrenceLimit	Money		12500	12500
400040031	TRUE	PerPersonLimit	Money		5000	5000
400040031		ValidateBusinessSegmentID	Char	9		Workers Co
400040031		BrokerageRate	Float	2.50%		2.50%
400040031		MarginDollars	Money	10000		10000
400040031		ThruDate	DateTime	12/31/2015		12/31/2015
400040032	TRUE	OccurrenceLimit	Money			
400040032	TRUE	PerPersonLimit	Money			
400040032		ValidateBusinessSegmentID	Char	9		Workers Co
400040032		BrokerageRate	Float	2.50%		2.50%
400040032		MarginDollars	Money	0		0
400040032		ThruDate	DateTime	12/31/2015		12/31/2015

612a
612b
612c
612d

FIG. 6D

640

Quote ContractSectionID	Editable	FieldName	DataType	Quote ContractSection	Quote A Submitted	Quote B Submitted	Displayed
400040030	TRUE	OccurrenceLimit	Money	115000	125000	←	125000 612a
400040030	TRUE	PerPersonLimit	Money	20000	25000		25000 612b
400040030		ValidateBusinessSegmentID	Char	9			Workers Co
400040030		BrokerageRate	Float	2.50%			2.50%
400040030		MarginDollars	Money	55000			55000
400040030		ThruDate	DateTime	12/31/2015			12/31/2015
400040031	TRUE	OccurrenceLimit	Money		12500		12500 612c
400040031	TRUE	PerPersonLimit	Money		5000	←	5000 612d
400040031		ValidateBusinessSegmentID	Char	9			Workers Co
400040031		BrokerageRate	Float	2.50%			2.50%
400040031		MarginDollars	Money	10000			10000
400040031		ThruDate	DateTime	12/31/2015			12/31/2015
400040032	TRUE	OccurrenceLimit	Money			500000	500000
400040032	TRUE	PerPersonLimit	Money			150000	150000
400040032		ValidateBusinessSegmentID	Char	9			Workers Co
400040032		BrokerageRate	Float	2.50%			2.50%
400040032		MarginDollars	Money	0			0
400040032		ThruDate	DateTime	12/31/2015			12/31/2015

FIG. 6E

700

720	730	740	750		
	Authorize Response	Authorization Expiration	Subjectivity	Comments	Comments 1 750a	Decline Comments 1 750b
Layer 1 710a	15.000000% 720a	3/10/2016 730a	Subjectivity 1 740a			
Layer 2 710b	1.123452%		Subjectivity 2			
Layer 3 710c	25.000000%	3/10/2016				
Layer 4 710d	Declined 720b					

Authorization Confirmation

FIG. 7

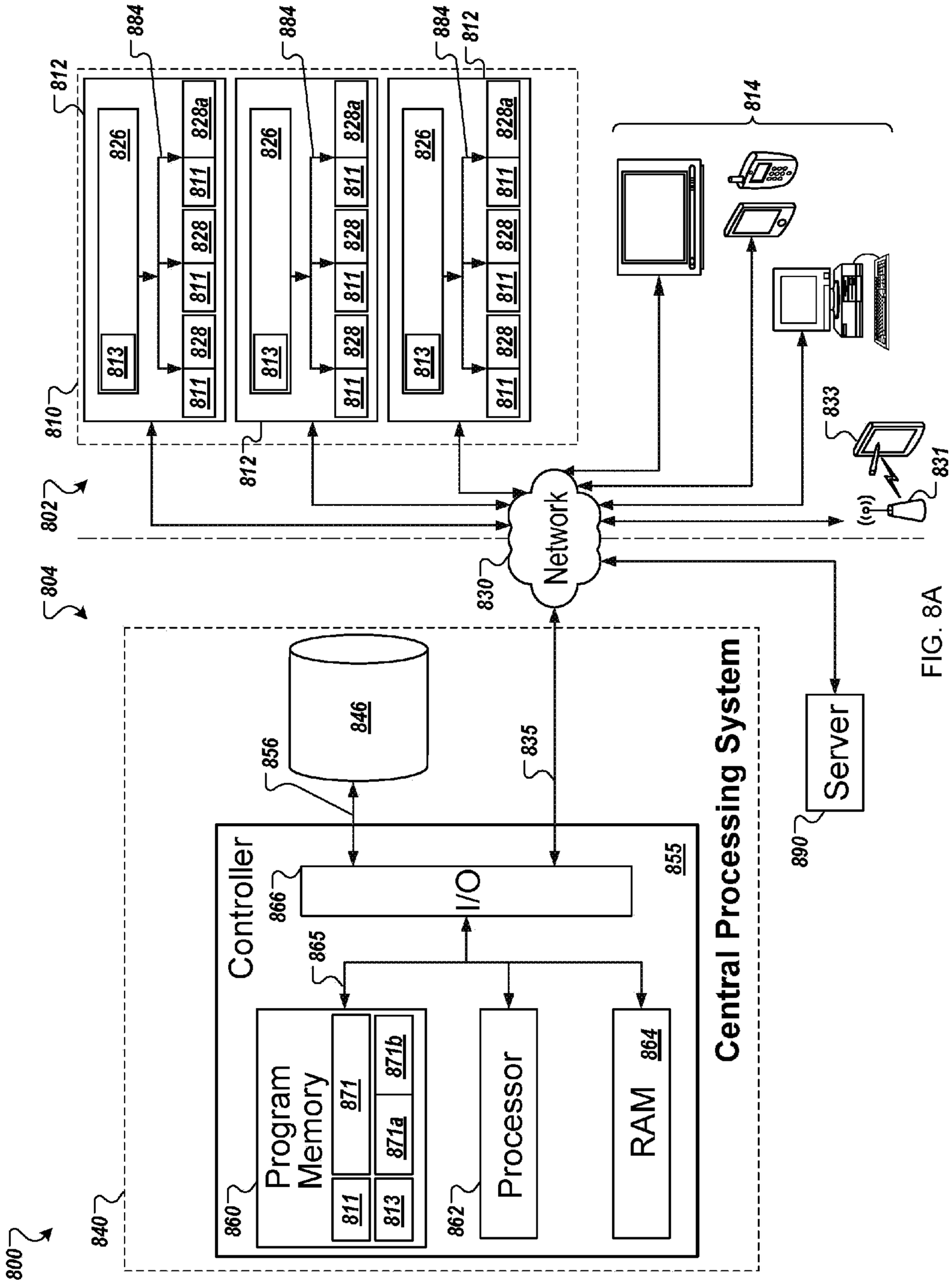
800
804
802
810
812
813
811
828
828a
826
884
814
833
831
830
Network
890
Server
840
Central Processing System
855
860
Program Memory
871
871a
871b
862
Processor
RAM
864
866
865
I/O
Controller
846
856
835

FIG. 8A

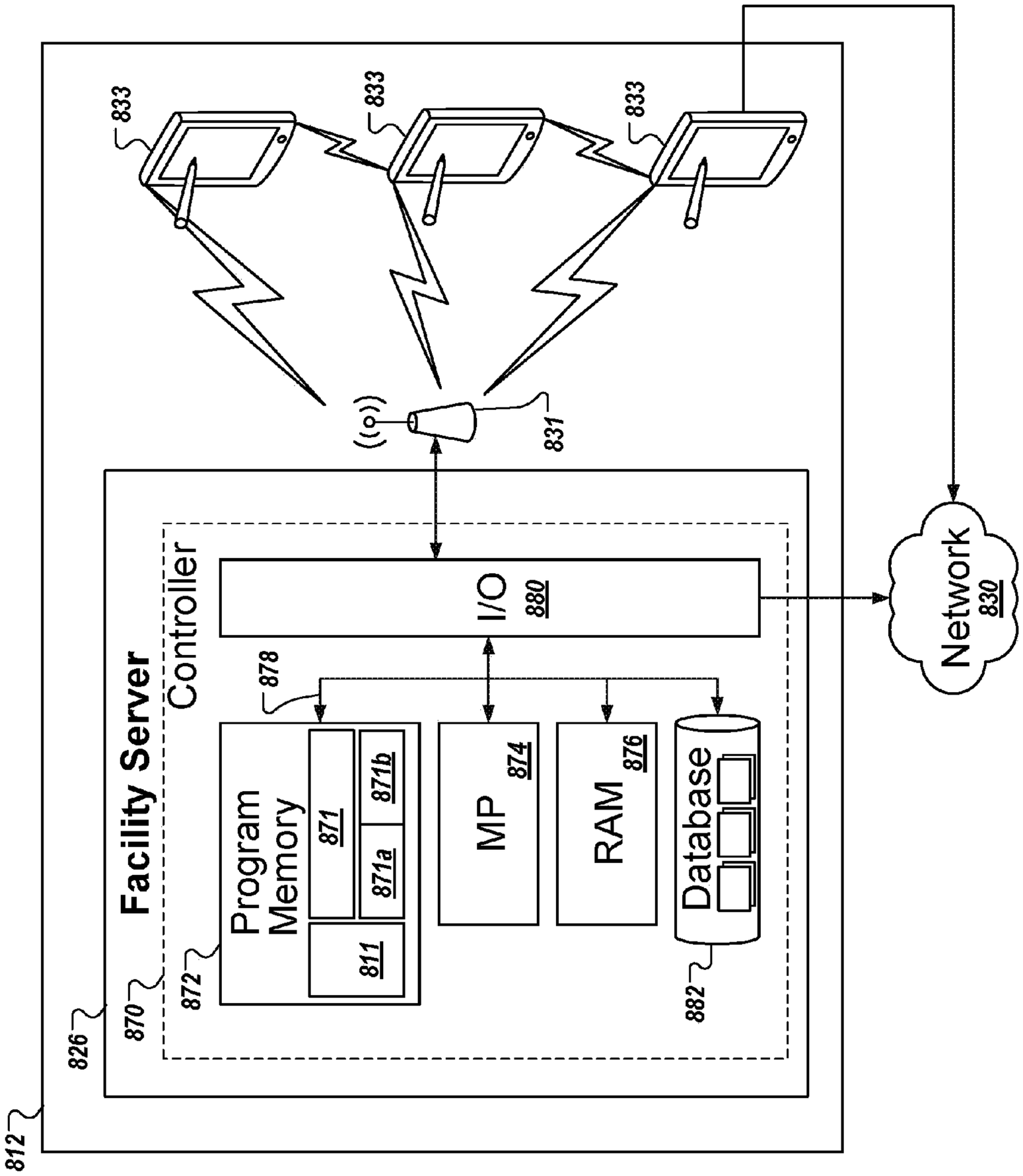
833
833
833
831
Facility Server
Controller
I/O
880
878
Program Memory
871
871b
871a
811
MP
874
RAM
876
Database
872
882
870
826
812
Network
830

FIG. 8B

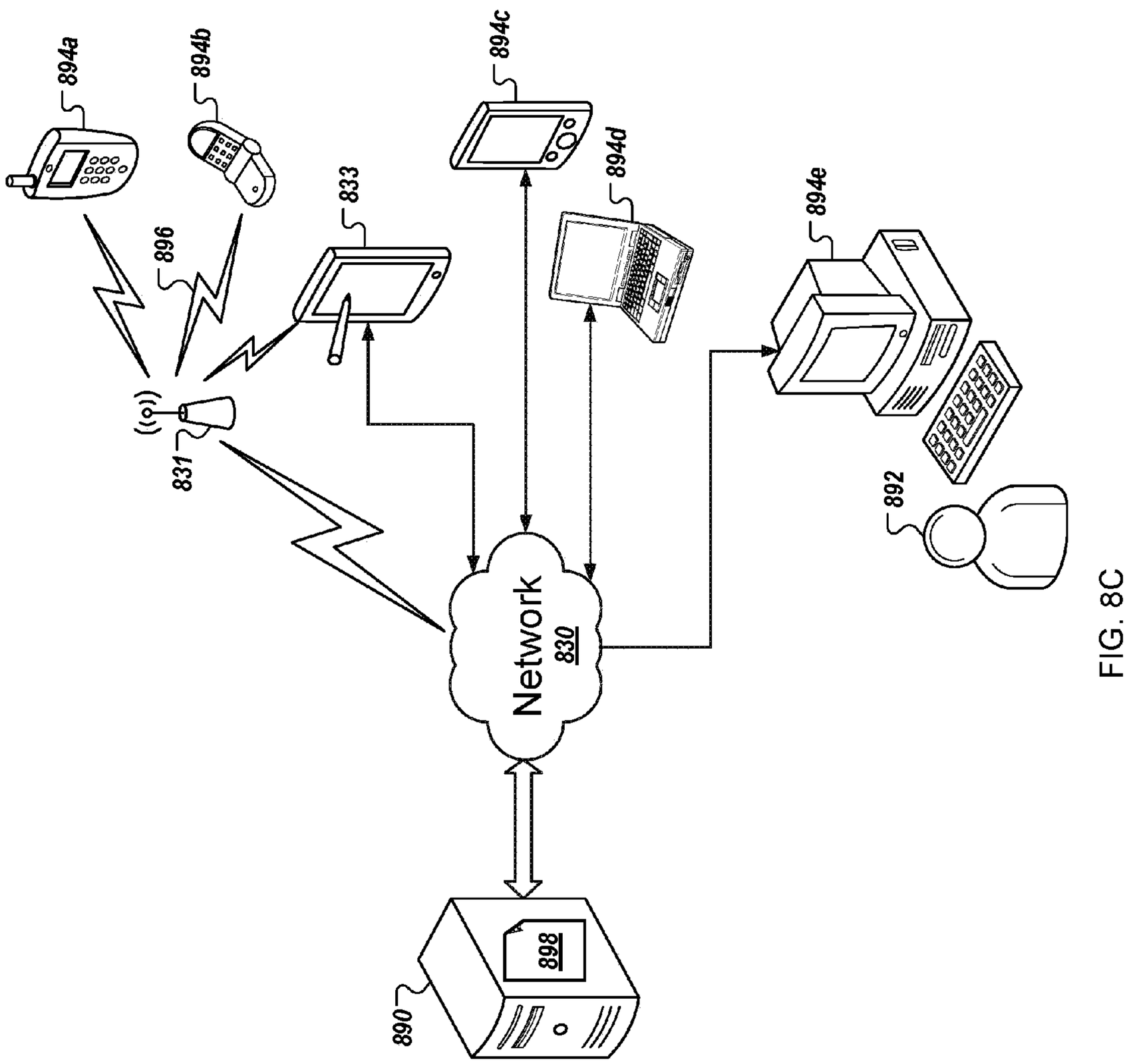

FIG. 8C

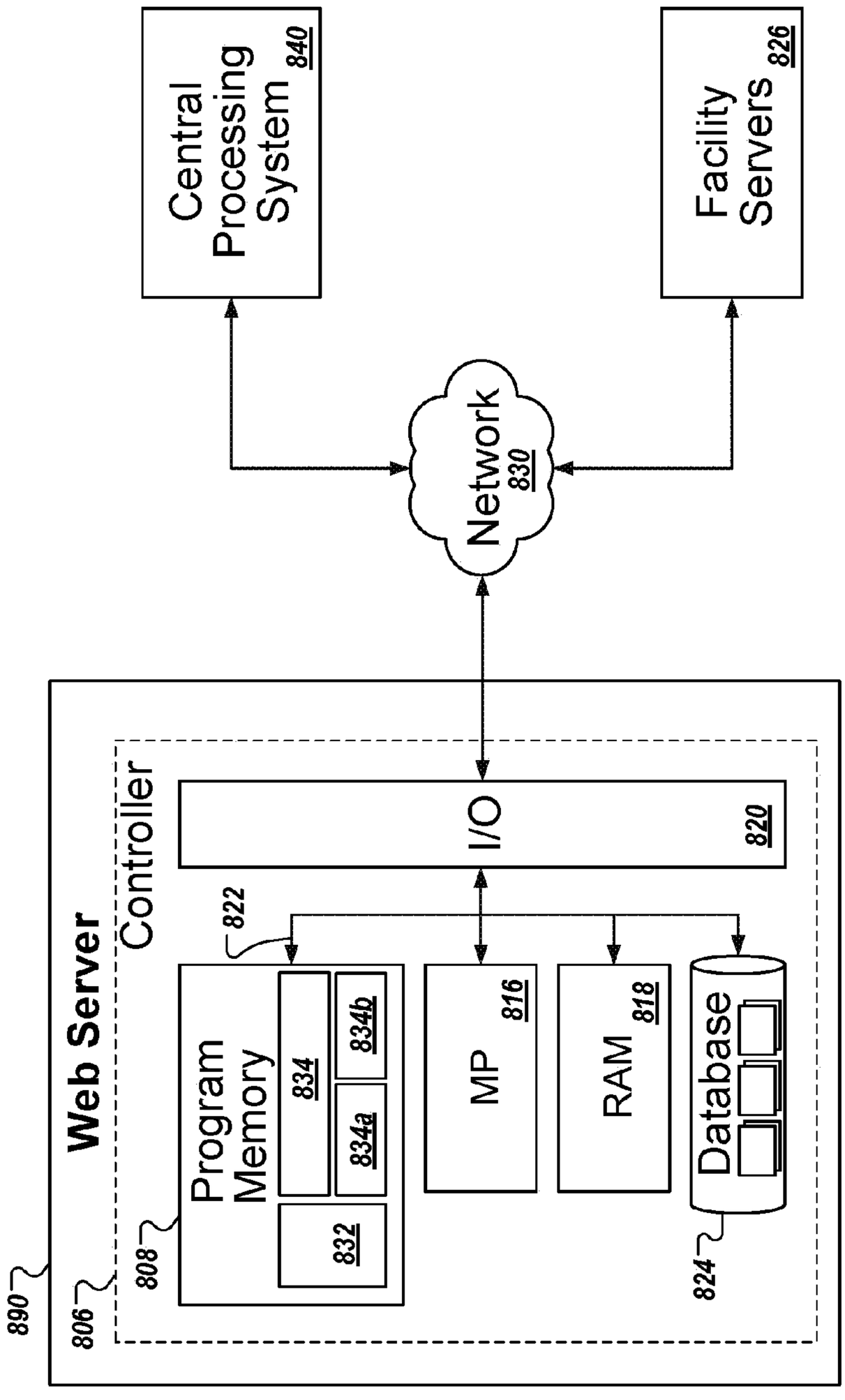
Central Processing System 840
Facility Servers 826
Network 830
Web Server 890
Controller 806
I/O 820
822
Program Memory 808
834
834a
834b
832
MP 816
RAM 818
Database 824

FIG. 8D

DASHBOARD INTERFACE, PLATFORM, AND ENVIRONMENT FOR AUTOMATED NEGOTIATION, BENCHMARKING, COMPLIANCE, AND AUDITING

RELATED APPLICATIONS

The present application is related to and claims the priority of U.S. Provisional Patent Application Ser. No. 62/262,880 filed Dec. 3, 2015, which is hereby incorporated by reference in its entirety.

BACKGROUND

Insurance brokers act as intermediaries for their clients, which may be entities seeking insurance coverage for certain risks. Insurance brokers bring clients together with insurance providers (known as "insurance carriers") who may be willing and able to provide the desired insurance coverage on beneficial terms for the client.

Reinsurance negotiation practice involves discrete provision of quote request, modification, and acceptance or declination during a life cycle involving parameter adjustments, contract document additions, and other information handling that is largely manually entered and shared between parties to a negotiation. This process is slow, laborious, and prone to loss of information important to transaction auditing. Additionally, the process makes benchmarking of negotiation metrics cumbersome and difficult.

SUMMARY OF ILLUSTRATIVE EMBODIMENTS

The present application describes dashboard user interfaces, methods, systems, and transactional environments for automated transaction negotiation, benchmarking, compliance, and auditing. During the automated process, in some embodiments, a quote template engine aids the user (e.g., broker) in customizing quote requests and follow-on quote information based upon learned parameters used in past negotiations. For example, data derived from completed transactions may be used to automatically identify preferred quote parameters based upon product type, geography, vendor, customer, or other common parameters. A real-time notification engine may alert parties (e.g., clients, customers, brokers and/or vendors) to the negotiation when new information is available and/or automatically present updating information for user review. This allows faster exchange of information leading to prompt completion of transactions. Information, in another example, may be created once and selectively shared with multiple parties. For example, depending upon negotiation partner, a party to the negotiation may select to share certain standard contracts or other documents (e.g., product details, warranties, etc.) uploaded and securely stored in the negotiation environment. During negotiations, an audit trail management engine tracks information shared and stores the steps of the negotiation for later audit review. The audit trail may automatically support financial market compliance requirements such that parties are reassured as to compliance without needing to individually manage and store compliance documentation. Additionally, parties to the negotiation may have the ability to review modifications to the agreement throughout the course of the negotiation. Further, a data mining engine may analyze the audit trail information to identify negotiation metrics related to the parties participating in the transactional environment. The negotiation metrics may be presented in report format to gain greater understanding of vendor appetites, trends in pricing, transaction volume, and other information around the globe. The information may be presented based on a number of negotiation variables including, in some examples, product type, geography, market, vendor, and deal size.

BRIEF DESCRIPTION OF THE FIGURES

FIG. **1** is a block diagram of an example environment for automated transaction negotiation, benchmarking, compliance, and auditing;

FIGS. **2**A and **2**B are a swim lane diagram illustrating an example method for negotiating a quote through a platform for automated transaction negotiation, benchmarking, compliance, and auditing;

FIGS. **3**A through **3**F are example screen shots of a user interface for automated negotiation of reinsurance quotes;

FIG. **4** is an example screen shot of an automated notification regarding a pending negotiation;

FIG. **5**A illustrates an example quote template data field architecture;

FIG. **5**B illustrates an example quote template creation dialogue;

FIG. **5**C is a swim lane diagram illustrating example communication flows;

FIGS. **6**A through **6**E are example quote development stages in negotiating a quote through a platform for automated transaction negotiation, benchmarking, compliance, and auditing;

FIG. **7** illustrates an example response received by a broker for a previously submitted quote;

FIGS. **8**A and **8**B illustrate various aspects of an exemplary architecture implementing a platform for automated transaction negotiation, benchmarking, compliance, and auditing;

FIGS. **8**C and **8**D illustrate an example server interface for connecting user computing devices within a platform for automated transaction negotiation, benchmarking, compliance, and auditing.

DETAILED DESCRIPTION

The present disclosure describes a dashboard interface, methods, systems, platforms, and transactional environments for automated transaction negotiation, benchmarking, compliance, and auditing. The transaction, for example, may include reinsurance quote negotiation. Turning to FIG. **1**, an example environment **100** includes a number of vendor (e.g., reinsurance carrier) computing systems **104**, a number of broker computing systems **102** (e.g., individual computing devices, servers, and/or organizational computing systems), and at least one auditor computing system **106** in communication with a network-based system **108** providing a variety of software engines **130** through **148** for supporting a platform for automated transaction negotiation, benchmarking, compliance, and auditing. The system **108** manages transaction data in a transaction data repository **110**, audit trail information in an audit trail repository **114**, and transactional documents (e.g., contracts, agreements, etc. created and uploaded by the brokers **102** and/or vendors **104**) in a document repository **112**.

In some implementations, the system **108** authenticates users connecting through the vendor computing systems **104** and broker computing systems **102** through a user management engine **130**. The user management engine **130**, for example, may authenticate users and/or computing systems

102, **104** based upon information stored within broker data **118** and vendor data **116**. In some examples, user passwords, valid computing system addresses, dashboard activity data, etc. may be maintained for individual reinsurers (via vendor data **116**) and/or brokers (via broker data **118**) connecting to the system **108**.

A broker connected to the system **108**, in some implementations, can prepare a reusable quote template, via a quote template engine **140**, to request a transactional quote from one or more of the vendors represented by the vendor computing systems **104**. The quote template engine **140**, for example, may supply stock transactional data elements for selection in preparing a quote template specific to a particular customer, groups of customers, product type, market, geographic region, etc. The broker may store one or more quote templates **120** in the transactional data repository **110**.

After preparing the quote template **120**, the broker can select one or more vendors (e.g., reinsurance carriers) from the vendors managed by the user management engine **130** through a negotiation automation engine **142**, and customize the quote template for the vendor(s). A dashboard GUI engine **134**, in some embodiments, provides the broker computing systems **102** with an interface for quote template creation and negotiation management. The brokers, in some embodiments, may select individual reinsurers for quote preparation based upon reinsurer data **116** maintained in the transactional data repository **110**. The reinsurer data **116**, in some examples, may include information regarding markets, regions, risk appetite, etc. for each reinsurer within the environment **100**.

In some implementations, when customizing the quote request, the broker includes a document **126**. In some examples, the broker uploads a document, such as a contract agreement, via a document management engine **138**. The document management engine **138** may store the uploaded document in the document repository **112**. In some embodiments, an audit trail management engine **144** correlates the uploaded document **126** with the initiated transaction.

Upon submission of a quote request by the broker via the negotiation automation engine **142**, in some implementations, an audit trail management engine **144** logs audit trail information **128** regarding the quote request in an audit trail repository **114**. The audit trail management engine **144**, for example, may track negotiation terms and shared documents throughout a transaction for future audit purposes (e.g., by the auditor computing system **106** and/or internally by the broker computing systems **102** and vendor computing systems **104**).

After the broker submits the quote request, targeted reinsurers can access and review quote information prepared by an account management engine **146** and presented by the dashboard GUI engine **134**. In another example, a real-time notification engine **148** may identify one or more recipients (e.g., individual users and/or users identified in a particular user group) for real-time notification regarding submission of the quote request. The real-time notification, in some examples, may include a mobile device app notification, a SMS message notification, an email notification, or an automated voice mail notification. The type of notification, in some embodiments, may be based in part upon user preferences managed by the user management engine **130**. Further, if the reinsurer is reviewing information supplied by the system **108** presented by the dashboard GUI engine **134**, in some embodiments, the dashboard GUI engine **134** may refresh the dashboard interface to supply real-time notification via the reinsurer dashboard.

The reinsurer, in some implementations, prepares a response to the quote request, for example via the dashboard GUI engine **134**. The audit trail management engine **144** may track the response supplied by the reinsurer as part of the audit trail information **128** for this particular transaction. Further details regarding the negotiation process is provided in the following figures, below.

In some implementations, a data mining engine **136** statistically analyzes information regarding the various transactions supported by the system **108**. The data mining engine **136** may compile terms of quotes from both accepted and declined quotes. Based on the terms and the accept/decline rates, the data mining engine **136** may generate metrics **124** associated with the terms of the quotes, which may be stored in the transaction data repository **110**. In certain embodiments, the quote template engine **140** may provide recommendations to users in populating the quote template **120**, for example based upon metrics **124** or other common features of past templates and/or stored templates (e.g., in audit trail data **128** or quote templates **120**).

In some implementations, a sales management engine **132** generates management and underwriter level placement progress reports. A "quote analysis" report, in some embodiments, may present the brokers real-time statistics related to the outcomes of quotes, captured along the timeline from request to bind. For example, the dashboard GUI engine **134** may update the dashboard interface of the brokers to present a graphical analysis of vendor declination reasons. The dashboard may display detailed analysis of entity declination reasons and entity acceptance reasons. Further, the sales management engine **132** may present the brokers with an analysis of percentage submissions quoted by each of a number of vendors, such as the percentage submission-to-quote presented for each of the top five vendors. The top five reinsurance carriers, in some examples, may be identified as the top five performing vendors within the dashboard environment, the five vendors determined to be most similar to the present vendor, and/or the top five vendors for the type metrics presently presented, etc. The sales management engine **132** may allow the brokers, via the dashboard interface, to review percentages of quotes submitted based upon deductible type. Similarly, the brokers may review percentages of quotes submitted based upon deductible ranges.

Turning to a "product types and industry analysis" report, in some embodiments, the sales management engine **132** may provide statistics regarding product types offered via the dashboard environment and purchasing trends across industry sectors. The dashboard interface for the brokers may present top product types by aggregate premiums. Furthermore, the information may be filtered by geography and/or by industry sectors. Further, the analysis may be broken down to illustrate top reinsurers for each of top product types and/or top industry sectors.

In some implementations, the sales management engine **132** may provide reports relating to analysis of trade volume and aggregate premiums across reinsurance carriers participating in the dashboard environment. For example, the analysis report may include the aggregate numbers of trades by a reinsurance carrier over a given period of time. The report may additionally include identification of a bound premium associated with the aggregate trades. The bound trades statistics and aggregate premium statistics may further be filtered by geography and/or by industry. Additional filtering options and combinations are possible, such as reinsurance carriers by premium and by geography.

Turning to FIGS. **2**A and **2**B, a flow diagram illustrates communication flows between a broker **202**, a platform **204**,

and a vendor **206** during an example transaction process **200**. The transaction process **200**, for example, may be supported by the environment **100** of FIG. **1**, where the platform **204** represents the system **108**, the broker **202** represents the broker computing systems **102**, and the vendor **206** represents the vendor computing systems **104**.

In some implementations, the transaction process **200** begins with the platform **204** supplying a quote request template user interface (**208**) to the broker **202**. The quote request template user interface, for example, may be provided by the dashboard GUI engine **124** of FIG. **1**. The quote request template may be based upon a number of selectable term options, product types, markets, geographical regions, and/or preferred vendors (e.g., quote variables).

Turning to FIG. **5**A, in some implementations, the user builds a quote template **550**. The quote template **550**, as illustrated, includes a number of contract sections **552**, each contract section **552** including a number of fields **554** (e.g., occurrence limit, per person limit, booked validate currency identifier, brokerage rate, margin dollars, and "thru" date for response deadline to the quote request). Certain terms, in some embodiments, (e.g., occurrence limit and per person limit, as illustrated) may be deemed editable **556** by the user when preparing the quote template. The editable field **556**, when activated, may allow the negotiating party (e.g., vendor such as a reinsurer) to modify a proposed term presented by the initiating party (e.g., broker).

Returning to FIG. **2**A, in some implementations, the broker **202** responds by providing one or more quote request template parameter settings (**210**) to the platform **204**. The quote request template parameter settings, for example, may include those terms selected by the broker **202** in preparing the quote template, such as the quote template **550** described in relation to FIG. **5**A.

In some implementations, the broker **202** uses a quote customization user interface to provide the quote request template parameter setting(s). Turning to FIG. **5**B, an example quote customization user interface **560** provides a mechanism for a user to select fields representing various template parameter settings. The user may enter the quote customization user interface **560**, for example, from the quote edit user interface **330** of FIG. **3**C. The user is presented with a menu containing available fields **562** from which to populate a second menu of selected template fields **564**. The fields **562**, for example, may be highlighted singularly or in groups and transferred into the second menu of selected template fields **564** using a set of movement controls **570**. The fields in the selected template fields **564**, further, may be rearranged by the user in a presentation order (e.g., using arrows **572**). The fields **562** populating the selected template fields **564**, for example, may be used to highlight features of a particular deal in a particular way.

In some implementations, a user has the option to create reusable templates, eliminating the need recreating field selections upon each quote. As illustrated, the present template has been named "Treaty Reinsurance/Excess Property & Casualty" in a name entry field **566**. Further, the user may be provided the ability to edit a saved template. In this manner, for example, the user may adjust previously used templates to better fit a current scenario. The previously stored template may be selected, for example, through a template drop-down menu **568**. Additionally or alternatively, as noted in a warning message **574** at the bottom of the quote customization user interface **560**, the user may alter an existing template. The alteration, for example, may cause a change to the template in all sections using the template. Alternatively, the user may customize any section, or layer of coverage, within the template.

Returning to FIG. **2**A, the platform **204**, in some implementations, stores the quote request template parameter settings (**212**). For example, as illustrated in FIG. **1**, the quote template engine **140** of the system **108** may store the quote request template parameter settings as quote template information **120** in the transaction data repository **110**.

In some implementations, the platform **204** prepares and supplies, for presentation to the broker **202**, a reinsurer selection user interface (**214**). The broker **202**, through the reinsurer selection user interface, may select one or more reinsurers for sharing a quote request based upon the quote request template. The reinsurers, in some embodiments, may be filtered by the platform **204** and/or the broker **202** to aid in selection of one or more reinsurers. In some examples, the reinsurers may be filtered by the market(s) identified within the quote template, reinsurers having a past relationship with the broker **202**, product types identified within the quote template, business segments identified within the quote template, reinsurers satisfaction ratings, and/or reinsurers providing services within a particular geographic region.

In some implementations, the broker **202** selects one or more reinsurers through the reinsurer selection user interface, and prepares a quote request, using the quote request template, specifically geared to negotiations with the selected reinsurer(s). For example, the broker **202** may supply one or more deadlines **216** associated with negotiations with the one or more reinsurers. Further, the broker **202**, in some implementations, provides contract layer settings **218** specific to particular sections of the quote request being prepared for negotiation. The contract layer settings **218**, in some examples, may include term values, term editing settings, and/or layer visibility settings. The contract layer settings **218**, in some embodiments, may vary in part based upon different reinsurers selected through the reinsurer selection user interface. For example, a first contract layer may be made visible by the broker **202** to a first reinsurer but not a second reinsurer.

Turning to FIG. **6**A, for example, a quote request **600**, based upon the quote template **550** of FIG. **5**A, includes two layers **604***a*, **604***b* in contract section **602**. Each layer **604***a*, **604***b* includes values associated with at least a portion of the terms. Additionally, each layer includes a deadline **606***a*, **606***b* of Dec. 31, 2015.

Returning to FIG. **2**A, in some implementations, the platform **204** stores the reinsurer selections, deadlines, and contract layer settings (**220**). For example, as illustrated in FIG. **1**, the quote template engine **140** of the system **108** may store the deadline(s), reinsurer selection(s) and contract layer settings as active quote data **122** in the transaction data repository **110**.

In some implementations, the platform **204** prepares a document upload user interface (**222**) for presentation to the broker **202**. The document upload user interface, for example, may provide the broker **202** with the opportunity to upload one or more documents and associate the document(s) with the quote request. The documents, in some examples, may include contracts, contract addendums, electronic signatures, term agreements, client information (e.g., financial, structural, etc.), and/or broker information. In some embodiments, the document upload user interface allows the broker **202** to select a type of document. The type, for example, may be provided for audit trail purposes (e.g., contract proposal, contract addendum, executed contract, etc.). Additionally, the document upload user interface may allow the broker **202** to apply visibility settings associated

with each document. For example, the broker **202** may elect to make the document visible to only one reinsurer associated with the quote request. In some embodiments, the broker **202** may later opt to "unshare" a particular document with one or more reinsurers. Further, in some embodiments, the broker **202** may apply read/write access controls to the document. Alternatively, documents may be read-only when supplied to the platform **204**, for example to maintain content control for auditing purposes.

In some implementations, the broker **202** supplies, via the document upload user interface to the platform **204**, one or more documents and document access control settings (**224**). For example, as illustrated in FIG. **1**, the broker computing system **102** may supply the document(s) and access control setting(s) to the system **108** through the dashboard GUI engine **134**.

In some implementations, the platform **204** stores the broker document(s) **226**. For example, the document management engine **138** of the system **108** of FIG. **1** may store the broker documents and settings as document data **126** in the document repository **112**.

In some implementations, the platform **204** provides a quote request available notification and/or quote entry user interface (**228**) for presentation to the vendor **206**. The notification/user interface, for example, may be provided in response to the broker **202** releasing the quote request for sharing with the reinsurer(s). For example, the document upload user interface may include a quote release. Alternatively, the broker **202** may release the quote request for sharing with the vendor **206** via a separate user interface (e.g., via the reinsurer selection user interface or other quote preparation user interface).

In the event of a quote request available notification, one or more users associated with the vendor **206**, in some implementations, receive an automated notification via a personal computing device, such as a mobile device app notification. Turning to FIG. **4**, a mobile app notification interface **400** alerts the user regarding a new quote proposal and invites the user to view the proposal through selection of a "view proposal" control **402**. The quote request available notification, for example, may be prepared and issued by the real-time notification engine **148** of the system **108**, as illustrate din FIG. **1**. Other examples of real-time notifications include SMS message, a dashboard alert (e.g., supplied by the dashboard GUI engine **134** of the system **108**), and an automated voicemail message.

In the event of a quote entry user interface, in some implementations, the vendor **206** may be presented with a reinsurer dashboard interface **300**, as illustrated in FIG. **3**A. Turning to FIG. **3**A, the dashboard interface **300** includes a listing of clients **302** by placement year. Year 2015 and client "Sample Insurance Company" are selected within the listing of clients **302**, causing presentation of a listing of placements **304** related to client "Sample Insurance Company". Each placement **306** in the listing of placements **304** includes an effective date **308** (e.g., the date the broker released the quote request to the reinsurer), a document indicator **310** (e.g., indicating whether any documents are available), a quote indicator **312** (e.g., indicating whether the quote request is open for editing), and a firm order terms (FOT)/authorization indicator **314** (e.g., indicating whether the quote request is open for authorization). As illustrated, a new quote request **316***a* (dated Dec. 18, 2015 with a quote indicator **312** designated an unlocked state) is available for reinsurer selection.

Upon selection of the new quote request **316***a*, in some implementations, the reinsurer is presented with a quote edit user interface **330**, as illustrated in FIG. **3**C. Turning to FIG. **3**C, the quote edit user interface includes a listing of contract layers **332**, each including a respective effective date **334**. As illustrated, a first layer **332***a* is selected, and layer details **336** are presented to the reinsurer for review and editing via a quote interface **338***a*. The layer details **336**, for example, correspond to the visible quote request terms as designated in the quote contract section **602** of the quote request **600** of FIG. **6**A. Turning to FIG. **6**A, as illustrated, a displayed section **608** corresponds generally to the terms illustrated in the layer details **336**. At this point in the negotiation, the reinsurer has not submitted the quote. Turning to FIG. **6**B, a quote process diagram **610** illustrates that the term values of Quote A are "Not Submitted", a set of editable terms **612** being available for reinsurer modification, including a layer 1 occurrence limit term **612***a*, a layer 1 per person limit term **612***b*, a layer 2 occurrence limit term **612***c*, and a layer 2 per person limit term **612***d* (presently blank). Turning to FIG. **6**C, a quote process diagram **620** illustrates that the layer 2 per person limit term **612***d* has been modified by the reinsurer with the addition of the value 5000. Returning to the quote edit user interface of FIG. **3**C, the reinsurer may optionally modify the editable quote terms of the pending quote. Alternatively, the reinsurer may opt to wait for a firm order from the broker **338***b* or decline quoting **338***c*.

As part of reviewing the quote request provided by the broker **202**, the vendor **206** may review one or more documents uploaded by the broker **202**. Turning to FIG. **3**B, a document review user interface **320** presents a number of document listings **326** of documents made available by a first party **324***a*, **324***b* to the negotiation for review and download **327** by a user of a second party **324***a*, **324***b* to the negotiation. For example, a first party **324***a* may correspond to the broker **202** of FIG. **2**A, while a second party **324***b* may correspond to the vendor **206** of FIG. **2**A. The user interface **320**, in some embodiments, is accessible to the second party **324***b* via the reinsurer dashboard interface **300** of FIG. **3**A (e.g., as evidenced by document indicator **310**).

The document listings **326** of the document review user interface **320**, in some implementations, are arranged by category **323** (e.g., new/revised, analytics, proposal) so the user may quickly identify relevant documents. In a particular example, a new/revised category **323***a* may draw attention to any documents added and/or revised since the user's last access to the user interface **320**. Alternatively or in addition to the new/revised category **323***a*, one or more document listings **326** may be associated with a status indicator **325** (e.g., *NEW* as illustrated), demonstrating a present status of the associated document listing **326**.

In some implementations, the document review user interface **320** may include one or more dates **328** associated with the document listings **326**, such as a last downloaded date **328***a*, indicating the date the document was most recently accessed by the user (or, alternatively, another user associated with the reinsurer **324***b*) and an access granted data **328***b*, indicating the date the user was granted access to the corresponding document. If the document has previously been accessed by the second party **324***b*, in the illustrated example, an access by indicator **329** may identify a particular user of the second party **324***b* who most recently accessed the corresponding document of the particular document listing **326**.

Although not illustrated, in some embodiments, one or more documents may include access rights identifying whether the second party may edit or otherwise modify (e.g., rename, append comments to, etc.) a particular document identified within the document listing **326**.

Turning to FIG. **2**A, upon editing one or more quote terms, the vendor **206** provides customized quote details (**230**) to the platform **204**. The customized quote details, for example, may be entered via the dashboard GUI engine **134** of the system **108** of FIG. **1** and provided to the negotiation automation engine **142**.

In some implementations, the platform **204** stores the reinsurer quote details (**232**). For example, the quote details may be stored to the active quotes data **122** in the transaction data repository **110** by the system **108**, as illustrated in FIG. **1**. Further, the present state of the negotiation may be updated in the audit trail data **128** of the audit data repository **114** by the audit trail management engine **144**.

Turning to FIG. **2**B to continue the transaction process **200** of FIG. **2**A, in some implementations, the platform **204** provides a quote available notification and/or quote review user interface (**234**) to the broker **202**. The notification/user interface, for example, may be provided in response to the broker **202** releasing the quote request for sharing with the reinsurer(s). For example, the document upload user interface may include a quote release. Alternatively, the broker **202** may release the quote request for sharing with the vendor **206** via a separate user interface (e.g., via the reinsurer selection user interface or other quote preparation user interface).

In the event of a quote available notification, one or more users associated with the broker **202**, in some implementations, receive an automated notification via a personal computing device, such as a mobile device app notification, as described in relation to the automated notification process described in step **228**. The quote available notification, for example, may be prepared and issued by the real-time notification engine **148** of the system **108**, as illustrated in FIG. **1**. Other examples of real-time notifications include SMS message, a dashboard alert (e.g., supplied by the dashboard GUI engine **134** of the system **108**), and an automated voicemail message.

In the event of a quote review user interface, in some implementations, the broker **202** may be presented with the present terms of the quote, including the modification made by the vendor **206**. For example, as shown in FIG. **6**D, a quote process diagram **630** illustrates the terms associated with the pending quote, including the terms **612** editable by the reinsurer. The broker **202** may review these terms and determine, with the client, whether to accept the reinsurer's quote.

If the client agrees to the quote supplied by the vendor **206**, in some implementations, the broker **202** issues a client firm order (**236**) to the platform **204**. The first order may either validate the terms of the quote as adjusted by the vendor **206** or reinstate the initial terms as supplied by the broker **202** in the quote request. The firm order, in some embodiments, may be placed via a firm order user interface **350** as illustrated in FIG. **3**F.

Turning to FIG. **3**F, the firm order user interface **350** may include a listing of one or more pending transactions **352**. Each pending transaction may be associated with an authorization deadline **366**. Each pending transaction may include a transaction name or identifier **354**, one or more layer identifiers **356**, an effective date **358**, and/or a limit and retention value **360**. To modify the terms of the quote, a user may select a markets edit control **362** and/or a terms and fields edit control **364**.

Upon selection of the markets edit control **362**, in some implementations, the user may limit data access of particular markets. A selected market, for example, may be allowed to edit data, such as authorization percent, comments, and subjectivities. Additionally or alternatively, the user may grant read-only access to remaining markets using the markets edit control **362**. While the quote enters a read-only state after submission, designated brokers within the selected market may utilize the control to unlock the read-only state and enter/edit data. The market edit control **362** may improve data quality and process management.

Upon selection of the terms and fields edit control **364**, in some implementations, the user is presented with a graphical user interface for adding, removing, and/or exchanging present fields included in the pending quote as well as to adjust values associated with each of the terms represented by those fields. The user interface, for example, may be similar to the layer details illustrated in the graphical user interfaces of FIGS. **3**D and **3**E.

In some implementations, upon completion of validating, adjusting, or reinstating the terms of a particular transaction **354**, the user may opt to publish the firm order (e.g., share with the associated reinsurer) via a publication control **368**.

Once the firm order terms are established, these options are provided by the broker **202** to the platform **204**, in some implementations, as client firm order terms (**236**).

In some implementations, the platform **204** stores the client firm order terms (**238**). For example, the firm order terms may be stored to the active quotes data **122** in the transaction data repository **110** by the system **108**, as illustrated in FIG. **1**. The firm order terms, for example, may be an adjustment validation or a term reinstatement. Further, the present state of the negotiation may be updated in the audit trail data **128** of the audit data repository **114** by the audit trail management engine **144**.

In some implementations, the platform **204** provides, for presentation to the vendor **206**, a firm order notification and/or firm order review user interface (**240**). The notification/user interface, for example, may be provided in real-time in response to the broker **202** providing the client firm order terms (**236**).

In the event of a firm order notification, one or more users associated with the vendor **206**, in some implementations, receive an automated notification via a personal computing device, such as a mobile device app notification, as described in relation to the automated notification process described in step **228**. The firm order notification, for example, may be prepared and issued by the real-time notification engine **148** of the system **108**, as illustrate din FIG. **1**. Other examples of real-time notifications include SMS message, a dashboard alert (e.g., supplied by the dashboard GUI engine **134** of the system **108**), and an automated voicemail message.

In the event of a firm order review user interface, in some implementations, the vendor **206** is presented with the current terms of the quote, including any reinstatement made by the broker **202**. For example, as shown in a layer authorization user interface **340** of FIG. **3**D, the vendor **206** may elect to authorize **342** or decline **344** each individual layer **332** of the quote. In the event of authorization, the reinsurer is presented with a set of controls **346** for entering authorization details. In particular, the authorization controls **346**, as illustrated, include an authorized percentage data entry field **346***a* for authorizing the quote up to a percentage difference from the present proposed values, an authorized amount data entry field **346***b* for authorizing the quote up to a monetary difference from the present proposed values, an authorization expiration data entry field **346***c* for entering a deadline for client acceptance of the authorization, and a reinsurer reference number data entry field **346***d* for entering a reinsurer-specific identifier related to the pending quote.

Further, the authorization controls **346**, as illustrated include a subjectivity text entry region **346***e* providing a text field for clarification and/or expansion on the meaning and scope of various quote terms and a comments text entry region **346***f* for adding any quote-specific information not captured by the remaining data entry fields **346**.

Alternatively, if the reinsurer declines authorization of one or more of the layers **332**, the reinsurer may enter comments into a text entry region of a declination dialogue box **348**. For example, the reinsurer may supply reasons for declining authorization to the pending quote.

In some implementations, if the reinsurer declines authorization of one or more of the layers **332**, the data mining engine **136** may generate metrics **124** associated with the reinsurer's risk appetite by comparing the terms of the declined layers and the terms accepted by the existing market. The generated metrics **124** may be stored in the transaction data repository **110**.

FIG. **3**E shows another exemplary screen shot of the layer authorization user interface **340** when the reinsurer selects a second layer **332***b*. In some embodiments, the vendor **206** may elect to authorize **342** or decline **344** the second layer **332***b*. In the event of authorization, the reinsurer is presented with a set of controls **346** for entering authorization details. In particular, the authorization controls **346**, as illustrated, include an authorized percentage data entry field **346***a* for authorizing the quote up to a percentage difference from the present proposed values, an authorized amount data entry field **346***b* for authorizing the quote up to a monetary difference from the present proposed values, an authorization expiration data entry field **346***c* for entering a deadline for client acceptance of the authorization, and a reinsurer reference number data entry field **346***d* for entering a reinsurer-specific identifier related to the pending quote. Further, the authorization controls **346**, as illustrated include a subjectivity text entry region **346***e* providing a text field for clarification and/or expansion on the meaning and scope of various quote terms and a comments text entry region **346***f* for adding any quote-specific information not captured by the remaining data entry fields **346**.

Alternatively, if the reinsurer declines authorization of the second layer **332***b*, the reinsurer may enter comments into a text entry region of a declination dialogue box, such as the text entry region of the declination dialogue box **348** shown in FIG. **3**C. For example, the reinsurer may supply reasons for declining authorization to the pending quote.

Upon authorization and/or declination, in some implementations, the vendor **206** provides the authorization and/or declination information (**242**) to the platform **204**. The information may additionally include one or more documents supplied by the vendor **206**. For example, the reinsurer may include a contractual agreement, detailed proposal, or other information related to the transaction as a separate document.

In some implementations, the platform **204** stores the reinsurer authorization information (**244**). For example, the information entered into the data fields **346** or declination reasons entered via dialogue box **348** may be stored to the active quotes data **122** in the transaction data repository **110** by the system **108**, as illustrated in FIG. **1**. The authorization information, for example, may be a quote validation. Further, the present state of the negotiation may be updated in the audit trail data **128** of the audit data repository **114** by the audit trail management engine **144**.

In some implementations, the platform **204** provides a marketing results notification and/or quote review user interface (**246**) to the broker **202**. The notification/user interface, for example, may be provided in response to the vendor **206** submitting the authorization and/or declination information for sharing with the broker **202**.

In the event of a marketing results notification, one or more users associated with the broker **202**, in some implementations, receive an automated notification via a personal computing device, such as a mobile device app notification, as described in relation to the automated notification process described in step **228**. The marketing results notification, for example, may be prepared and issued by the real-time notification engine **148** of the system **108**, as illustrate din FIG. **1**. Other examples of real-time notifications include SMS message, a dashboard alert (e.g., supplied by the dashboard GUI engine **134** of the system **108**), and an automated voicemail message.

In the event of a marketing results user interface, in some implementations, the broker **202** may be presented with the present terms of the quote, including the authorization information and/or declination comments submitted by the vendor **206**. For example, as shown in FIG. **6**E, a quote process diagram **640** illustrates the terms associated with the pending quote, including the terms **612** authorized by the reinsurer. The broker **202** may review these terms and share with the client. In some implementations, the broker **202** provides client final lines (**248**) regarding the finalized transaction terms to the platform **204**. In some embodiments, the final lines include terms/contracts/details contained in one or more documents for sharing with the vendor **206**. This confirms the agreement reached. In some embodiments, rather than including simply an automated collection of the agreed upon terms, the broker representative submitting information through the broker **202** has the opportunity to enhance or customize the final lines information with additional information. In some examples, the broker representative may add a personalized note, such as a thank you or a request for feedback, or other brokerage-specific information, Further, in some embodiments, the broker **202** may be invited to acknowledge and confirm the content of the final lines. In response to receiving the client final lines, in some implementations, the platform **204** stores the client final lines (**250**). For example, the client final lines information may be stored to the active quotes data **122** in the transaction data repository **110** by the system **108**, as illustrated in FIG. **1**. Further, the present state of the negotiation may be updated in the audit trail data **128** of the audit data repository **114** by the audit trail management engine **144**. The details, in some embodiments, may be released to the data mining engine **136** of FIG. **1** for developing metrics data. The data mining engine **136**, for example, may combine the present transaction data with other historical transaction data in developing metrics data **124**, stored in the transaction data repository **110**.

In some implementations, the platform **204** provides a final lines review user interface (**252**) to the vendor **206** for review of the finalized information. For example, the reinsurer may access the completed transaction information via a dashboard interface.

In some implementations, the platform **204** prepares and stores the audit trail regarding the finalized transaction (**254**). Rather than updating the audit trail at each stage of the transaction, for example, audit trail information may be collected and stored after the transaction is finalized (or, alternatively, canceled at a prior step within the transaction process **200**).

In some embodiments, with proper authorization, the auditor system **106**, the vendor computing systems **104**, or the brokers computing systems **102** may access the audit

trail information **128** in the audit data repository **114** to search for misplaced information relating to current or past quotes. For example, in the event of a catastrophic system failure relating to a repository system relating to the vendor computing systems **104**, the reinsurer may access the audit data repository **114** to retrieve documents relating to the state of negotiation.

In certain implementations, various departments within the organization managing the system **108** may access the audit data repository **114**, the transaction data repository **110**, and/or the document repository **112**. For example, a legal department within the organization may access the audit trail information **128** for internal auditing in order to satisfy local and federal government compliance. A marketing department may utilize stored information to generate marketing data and develop marketing strategy.

Continuing the discussion relating to FIG. **1**, in some exemplary embodiments, an information technology department within the organization may monitor the audit trail information **128** stored in the audit data repository **114** to assess the performance and functionality of the system **108**, and the repositories **110**, **112**, **114**. Alternatively, an information technology (IT) department may rely on data collected from the audit trail information **128** to assess the overall health of the environment **100**.

In some embodiments, the accounting department within the organization may use the audit trail information **128** to generate reports detailing the financial state of the organization and sanity check transactions. The accounting department may compile statistical data relating to risk appetite, market trend, etc.

If, for example, disputes relating to the quotes arise during or after the completion of a transaction, internal and/or external audit teams may access the audit trail information **128** in the audit data repository **114** for proof of a binding contact including stated terms and conditions. External accounting agencies may similarly access the audit trail information **128** for independent auditing and/or settling possible dispute.

In certain embodiments, the audit trail information **128** may include both content data and metadata. The metadata may indicate a user identification number of a broker, a user identification number of a reinsurer and timestamp for a transaction. The metadata may be available to the internal/external auditors.

Although illustrated as a single entity "platform **204**", the platform **204** may include a number of interoperating systems, such as a reinsurer-interfacing system, a broker-interfacing system, and an audit trail management system. Similarly, the broker **202** and/or vendor **206** may represent a number of computing devices and/or system. For example, a first broker user or computing device may supply the quote request template parameter settings (**210**), while a different broker user or computing device applies the contract layer settings (**218**).

Although illustrated in a particular series of events, in other implementations, the steps of the transaction process **200** may be performed in a different order. For example, the broker may iterate between setting template parameter settings (**210**), deadline(s) (**216**) and/or contract layer settings (**218**) while setting up a quote request for a reinsurer. Additionally, in other embodiments, the transaction process may include more or fewer steps while remaining within the scope and spirit of the transaction process **200**.

FIG. **7** illustrates an example response received by a broker for a previously submitted quote. An authorization confirmation table **700** includes, for example, four contract layers **710** from up to four different reinsurers. Each layer may include an authorize response **720**, an authorization expiration **730**, a subjectivity **740**, and comments **750**. In some implementations, the broker may receive the authorization confirmation from four reinsurers, with each reinsurer responding to a different layer. Reinsurer 1 may respond to layer 1 **710***a* with an authorize response **720***a* of 15.000000%, an authorization expiration date **730***a* of Mar. 10, 2016, and a subjectivity 1 **740***a*. The authorize response **720***a* includes an authorized percentage difference from the present proposed values included in the quote. The authorization expiration **730***a* indicates the date of expiration for the authorization confirmation for layer 1 **710***a* provided by Reinsurer 1. The subjectivity field **740***a* may include additional terms and conditions for the contract.

In certain embodiments, Reinsurer 2 may enter a comment **750***a* for layer 2 **710***b* with response for adding any quote-specific information not captured by the remaining data entry fields. Reinsurer 4 for layer 4 **710***d* may choose to decline the submitted quote in the authorize response **720***b*, and provide a reason for declination in a comment field **750***b*.

In some implementations, the authorization confirmation table **700** shown in FIG. **7** may be presented in a dashboard interface similar to those shown in FIGS. **3**A-**3**E. The dashboard interface may be provided to the broker computing system **102** by the dashboard GUI engine **134**. The dashboard GUI engine **134** may routinely update dashboard interface on the broker computing system **102** as reinsurers for different layers submit their responses separately. Alternatively, the dashboard GUI engine **134** may wait for responses from all reinsurers before sending the authorization confirmation table **700** to the broker computing system **102**.

FIG. **5**C is a flow diagram illustrating communication flows between a first, second, and third brokers **202**, vendor **206**, negotiation automation engine **142**, transaction data repository **110**, and quote template engine **140** during example transaction processes **580**. The transaction processes **580**, for example, may be supported by the environment **100** of FIG. **1**, where the brokers **202** represent the broker computing systems **102** and the vendor **206** represents the vendor computing systems **104**.

In some implementations, a first broker **202***a* customizes (**582**) a quote template "Quote Template A" using fields X, Y, Z, and Q via the quote template engine **140**. The quote template, for example, may be built using the user interface **580** described in relation to FIG. **5**B. The first broker **202***a* may reside or do business in a first geographic region (e.g., country, province, continent, etc.). The first broker **202***a* may or may not have a preexisting business relationship with vendor **206**.

In some implementations, the first broker **202***a* issues (**584**) a request for a quote via the negotiation automation engine **142**. The request, for example, may be submitted by the first broker **202***a* via the quote request interface itself or via an additional user interface including selection of the preexisting quote template. The request, for example, may identify vendor **206** as a particular (targeted) reinsurer or as one of a list of reinsurers identified by the user. The reinsurer, in a particular example, may be selected by the first broker **202***a* via a reinsurer selection interface. The quote request, in another example, may be entered via a quote request interface such as the quote request **600** illustrated in FIG. **6**A.

In some implementations, the negotiation automation engine **142** issues (**586**) the quote request to vendor **206**.

Issuance may be based upon selection of vendor **206** by the first broker **202***a*. Alternatively, the negotiation automation engine **142** may identify vendor **206** as an appropriate candidate for the quote request based upon the information provided by the first broker **202***a*. In transmitting the quote request, in some examples, the negotiation automation engine **142** may provide the vendor **206** with access to review quote information via a dashboard interface, or the negotiation automation engine **142** may issue a real-time notification regarding submission of the quote request by the first broker **202***a*.

In some implementations, the negotiation automation engine **142** associates (**588**) the fields selected in Quote Template A (X, Y, Z, Q) with the vendor **206** in the repository **110**. The repository **110**, for example, may include a collection of quote templates prepared via the quote template engine arranged in a database associating each quote template with contextual parameters such as, in some examples, creator of the quote request (e.g., broker), receiver(s) of the quote request (e.g., reinsurers), business segment, geography, deal size, date, product, client, etc.

Although illustrated as occurring after step **586** of issuing the quote request, in other embodiments, step **688** of associating the fields of Quote Template A may occur prior to or simultaneous with step **586**. Additionally, although customizing the quote template is illustrated as being handled by the quote template engine **140**, while issuance of the quote request is illustrated as being handled by the negotiation automation engine **142**, each of these steps may be part of what the first broker **202***a* perceives as a single graphical user interface-guided process, for example managed by the dashboard GUI engine **134** of FIG. **1**. Other modifications are possible while remaining within the scope and intent of the example transaction processes **580**.

At a later time, a second broker **202***b* initiates a similar transaction process. In some implementations, the second broker **202***b* customizes (**590**) a quote template using fields X, Y, Z, and D via the quote template engine **140**. The quote template, for example, may be built in a similar manner as described above in relation to step **582**. The second broker **202***b* may reside or do business in a second geographic region different than the first geographic region. The second broker **202***b*, similar to the first broker **202***a*, may or may not have a preexisting business relationship with vendor **206**.

In some implementations, the second broker **202***b* issues (**591**) a request for a quote via the negotiation automation engine **142**. The request, for example, may be submitted by the second broker **202***b* in a similar manner as described above in relation to step **584**.

In some implementations, the negotiation automation engine **142** associates (**592**) the fields selected in Quote Template B (X, Y, Z, D) with the vendor **206** in the repository **110**. Association may be conducted in a manner similar as described above in relation to step **588**.

In some implementations, the negotiation automation engine **142** issues (**593**) the quote request to vendor **206**. Issuance may be implemented in a manner similar as described above in relation to step **586**.

At a later time, a third broker **202***c* accesses (**594**) the quote request user interface via the quote template engine **140** to request a quote from at least vendor **206** (and, optionally, one or more additional reinsurers). The third broker **202***c* may reside or do business in a third geographic region (e.g., country, province, continent, etc.). The third broker **202***c* may or may not have a preexisting business relationship with vendor **206**.

To aid in template development, in some implementations, the quote template engine **140** accesses (**595**) previously stored templates associated with vendor **206** from the repository **110** and analyzes (**596**) the previously stored templates to determine a recommended template. The previously stored templates, in some embodiments, may all be associated with vendor **206**. The quote template engine **140**, in some examples, may identify Template A and Template B as sharing certain contextual parameters with the quote request being developed by the third broker **202***c* such as, in some examples, creator of the quote request (e.g., broker), receiver(s) of the quote request (e.g., reinsurers), business segment, geography, deal size, date, etc. Further, the quote template engine **140** may consider the recency and frequency of use of each of the previously stored templates.

In some implementations, the quote template engine **140** presents (**598**) the recommended template fields X, Y, Z, Q, and D to the third broker **202***c* via the quote request user interface. For example, the recommended template fields X, Y, Z, Q, and D may be automatically populated in the menu **564** of the quote customization user interface **560** of FIG. **5**B. In another example, the available fields in the menu **562** of the quote customization user interface **560** may be rearranged such that the recommended template fields X, Y, Z, Q, and D are presented at the top of the list.

These types of processes may continue, with the repository **110** building information regarding templates frequently used and fields most frequently desired by a number of brokers, and the quote template engine **140** may continue, based upon the increasing information, to refine recommendations based upon quote templates used in similar circumstances to those presented by a current requestor. In some implementations, the quote template engine **140** may track a usage history of each template for a requestor. The quote template engine **140** may also record a number of times a requestor uses a suggested template.

FIGS. **8**A and **8**B illustrate various aspects of an exemplary architecture implementing a platform **800** for automated transaction negotiation, benchmarking, compliance, and auditing. The high-level architecture includes both hardware and software applications, as well as various data communications channels for communicating data between the various hardware and software components. The platform **800** may be roughly divided into front-end components **802** and back-end components **804**. The front-end components **802** are primarily disposed within a client network **810** including one or more clients **812**. The clients **812** may be located, by way of example rather than limitation, in separate geographic locations from each other, including different areas of the same city, different cities, different states, or even different countries. The front-end components **802** may include a number of workstations **828**. The workstations **828**, for example, can be local computers located in the various locations **812** throughout the network **810** and executing various applications for automated transaction negotiation, benchmarking, compliance, and auditing.

Web-enabled devices **814** (e.g., personal computers, tablets, cellular phones, smart phones, web-enabled televisions, etc.) may be communicatively connected to locations **812** and the system **840** through a digital network **830** or a wireless router **2831**, as described below.

Referring now to FIG. **8**A, the front-end components **802**, in some embodiments, include a number of facility servers **826** disposed at the number of locations **812** instead of, or in addition to, a number of workstations **828**. Each of the locations **812** may include one or more facility servers **826** that may facilitate communications between the web-en-

abled devices **814** and the back-end components **804** via a digital network **830**, described below, and between the terminals **828**, **828**A of the locations **812** via the digital network **830**, and may store information for a number of customers/employees/accounts/etc. associated with each facility. Of course, a local digital network **884** may also operatively connect each of the workstations **828** to the facility server **826**. Unless otherwise indicated, any discussion of the workstations **828** also refers to the facility servers **826**, and vice versa. Moreover, environments other than the locations **812**, such as the kiosks, call centers, and Internet interface terminals may employ the workstations **828**, the web-enabled devices **814**, and the servers **826**. As used herein, the term "location" refers to any of these points of contact (e.g., call centers, kiosks, Internet interface terminals, etc.) in addition to the locations **812**, etc. described above.

The front-end components **802** communicate with the back-end components **804** via the digital network **830**. One or more of the front-end components **802** may be excluded from communication with the back-end components **804** by configuration or by limiting access due to security concerns. For example, the web enabled devices **814** may be excluded from direct access to the back-end components **804**. In some embodiments, the locations **812** may communicate with the back-end components via the digital network **830**. In other embodiments, the locations **812** and web-enabled devices **814** may communicate with the back-end components **804** via the same digital network **830**, but digital access rights, IP masking, and other network configurations may deny access of the web-enabled devices **814**. The web-enabled devices may also connect to the network **830** via the encrypted, wireless router **831**.

The digital network **830** may be a proprietary network, a secure public Internet, a virtual private network or some other type of network, such as dedicated access lines, plain ordinary telephone lines, satellite links, combinations of these, etc. Where the digital network **830** includes the Internet, data communication may take place over the digital network **830** via an Internet communication protocol. In addition to one or more web servers **890** (described below), the back-end components **804** may include a central processing system **840** within a central processing facility. Of course, the locations **812** may be communicatively connected to different back-end components **804** having one or more functions or capabilities that are similar to the central processing system **840**. The central processing system **840** may include processing circuitry (e.g., one or more computer processors) **862** adapted and configured to execute various software applications and components of the platform **800**, in addition to other software applications, such as a medication management system.

The central processing system **840**, in some embodiments, further includes a database **846** (which may include one or more databases). The database **846** can be adapted to store data related to the operation of the platform **800**. The central processing system **840** may access data stored in the database **846** when executing various functions and tasks associated with the operation of the platform **800**.

Although the platform **800** is shown to include a central processing system **840** in communication with three locations **812**, and various web-enabled devices **814** it should be understood that different numbers of processing systems, locations, and devices may be utilized. For example, the digital network **830** (or other digital networks, not shown) may interconnect the platform **800** to a number of included central processing systems **840**, hundreds of locations **812**, and thousands of web-enabled devices **814**. According to the disclosed example, this configuration may provide several advantages, such as, for example, enabling near real-time uploads and downloads of information as well as periodic uploads and downloads of information. This provides for a primary backup of all the information generated in the wireless data transfer process. Alternatively, some of the locations **812** may store data locally on the facility server **826** and/or the workstations **828**.

FIG. **8**A also depicts one possible embodiment of the central processing system **840**. The central processing system **840** may have a controller **855** operatively connected to the database **846** via a link **856** connected to an input/output (I/O) circuit **866**. It should be noted that, while not shown, additional databases may be linked to the controller **855** in a known manner.

The controller **855** includes a program memory **860**, the processing circuitry **862** (may be called a microcontroller or a microprocessor), a random-access memory (RAM) **864**, and the input/output (I/O) circuit **866**, all of which are interconnected via an address/data bus **865**. It should be appreciated that although only one microprocessor **862** is shown, the controller **855** may include multiple microprocessors **862**. Similarly, the memory of the controller **855** may include multiple RAMS **864** and multiple program memories **860**. Although the I/O circuit **866** is shown as a single block, it should be appreciated that the I/O circuit **866** may include a number of different types of I/O circuits. The RAM(s) **864** and the program memories **860** may be implemented as semiconductor memories, magnetically readable memories, and/or optically readable memories, for example. A link **835** may operatively connect the controller **855** to the digital network **830** through the I/O circuit **866**.

FIG. **8**B depicts one possible embodiment of the front-end components **102** [check number] located in one or more of the locations **812** from FIG. **8**A. Although the following description addresses the design of the locations **812**, it should be understood that the design of one or more of the locations **812** may be different from the design of others of the locations **812**. Also, each of the locations **812** may have various different structures and methods of operation. It should also be understood that while the embodiment shown in FIG. **8**B illustrates some of the components and data connections that may be present in a location **812**, it does not illustrate all of the data connections that may be present in a location **812**. For exemplary purposes, one design of a location is described below, but it should be understood that numerous other designs may be utilized.

Each of the locations **812**, as illustrated, has one or more portable computing devices **833** (e.g., notebook computers, tablet computers, smart phones, personal data assistants, etc.) and/or a facility server **826**. The digital network **884** and wireless router **831** operatively connect the facility server **826** to the number of portable computing devices **833** and/or to other web-enabled devices **814** and workstations **828**. The digital network **830** may be a wide area network (WAN), a local area network (LAN), or any other type of digital network readily known to those persons skilled in the art. The digital network **830** may operatively connect the facility server **826**, the portable computing devices **833**, the workstations **828**, and/or the other web-enabled devices **814** to the central processing system **840**.

Each portable computing device **833**, workstation **828**, client device terminal **2828***a*, or facility server **826** includes a controller **870**, as depicted in FIG. **8**B in relation to the server **826**. Similar to the controller **855** from FIG. **8**A, the controller **870** includes a program memory **872**, processing

circuitry (e.g., one or more microcontrollers or microprocessors) **874**, a random-access memory (RAM) **876**, and an input/output (I/O) circuit **880**, all of which are interconnected via an address/data bus **878**. In some embodiments, the controller **870** may also include, or otherwise be communicatively connected to, a database **882**. The database **882** (and/or the database **846** of FIG. **8**A) includes data such as client records, broker, records, reinsurer information records, quote template data, and other rules and miscellaneous information. As discussed with reference to the controller **855**, it should be appreciated that although FIG. **8**B depicts only one microprocessor **874**, the controller **870** may include multiple microprocessors **874**. Similarly, the memory of the controller **870** may include multiple RAMs **876** and multiple program memories **872**. Although the FIG. **8**B depicts the I/O circuit **880** as a single block, the I/O circuit **880** may include a number of different types of I/O circuits. The controller **870** may implement the RAM(s) **876** and the program memories **872** as semiconductor memories, magnetically readable memories, and/or optically readable memories, for example.

Either or both of the program memories **860** (FIG. **8**A) and **872** may also contain machine-readable instructions (i.e., software) **871**, for execution within the processing circuitry **862** (FIG. **8**A) and **874**, respectively. The software **871** may perform the various tasks associated with operation of the location or locations, and may be a single module **871** or a number of modules **871***a*, **871***b*. While the software **871** is depicted in FIGS. **8**A and **8**B as including two modules, **871***a* and **871***b*, the software **871** may include any number of modules accomplishing tasks related to location operation.

In addition to the controller **870**, the portable computing devices **833**, the workstations **828** and the other web-enabled devices **814** may further include a display and a keyboard as well as a variety of other input/output devices (not shown) such as a scanner, printer, mouse, touch screen, track pad, track ball, isopoint, voice recognition system, digital camera, bar code scanner, RFID reader, etc. A location employee may sign on and occupy each portable computing device **833**, workstation **828** or client device terminal **828***a* to assist the employee in performing his or her duties. Employees may sign onto the portable computing device **833**, workstation **828** or the client device terminal **828***a* using any available technique, such as entering a user name and password. If an employee signs on to the system using a portable computing device **833**, the network **884** communicates this information to the facility server **826**, so that the controller **870** may identify which employees are signed onto the platform **800** and which portable computing device **833**, workstation **828** or client device terminal **828***a* the employee is signed onto.

Various software applications resident in the front-end components **802** and the back-end components **804** implement functions related to location operation, and provide various user interface means to allow users (e.g., brokers) to access the platform **800**. One or more of the front-end components **802** and/or the back-end components **804** may include a user-interface application **811** for allowing a user to input and view data associated with the platform **800**, and to interact with the platform described herein. In one embodiment, the user interface application **811** is a web browser client, and the facility server **826** or the central processing system **840** implements a server application **813** for providing data to the user interface application **811**. However, the user interface application **811** may be any type of interface, including a proprietary interface, and may communicate with the facility server **826** or the central processing system **840** using any type of protocol including, but not limited to, file transfer protocol (FTP), telnet, hypertext-transfer protocol (HTTP), etc. Moreover, some embodiments may include the user interface application **811** running on one of the web-enabled devices **814**, while other embodiments may include the application **811** running on the portable computing device **833** in a location **812**. The central processing system **840** and/or the facility server **826** may implement any known protocol compatible with the user-interface application **811** running on the portable computing devices **833**, the workstations **828** and the web-enabled devices **814** and adapted to the purpose of receiving and providing the necessary information during the data transfer process.

For purposes of implementing the platform **800**, the user interacts with location systems (e.g., the central processing system **840**) via a number of web pages. FIG. **8**C depicts a web server **890** connected via the network **830** to a number of portable computing devices **833** and other web-enabled devices through which a user **892** may initiate and interact with the platform **800**. The web enabled devices may include, by way of example, a smart-phone **894***a*, a web-enabled cell phone **894***b*, a tablet computer **833**, a personal digital assistant (PDA) **894***c*, a laptop computer **894***d*, a desktop computer **894***e*, a portable media player (not shown), etc. Of course, any web-enabled device appropriately configured may interact with the platform **800**. The web-enabled devices **833** and **894** need not necessarily communicate with the network **830** via a wired connection. In some instances, the web enabled devices **833** and **894** may communicate with the network **830** via wireless signals **896** and, in some instances, may communicate with the network **830** via an intervening wireless or wired device **831**, which may be a wireless router, a wireless repeater, a base transceiver station of a mobile telephony provider, etc. Each of the web-enabled devices **833** and **894** may interact with the web server **890** to receive web pages, such as the web page **898** depicted in FIG. **8**C, for display on a display associated with the web-enabled device **833** and **894**. It will be appreciated that although only one web server **890** is depicted in FIG. **8**C, multiple web servers **890** may be provided for the purpose of distributing server load, serving different web pages, implementing different portions of the location web interface, etc.

Turning now to FIG. **8**D, the web server **890**, like the facility server **826**, includes a controller **806**. Similar to the controllers **855** and **870**, the controller **806** includes a program memory **808**, processing circuitry (e.g., one or more microcontrollers or microprocessors) **816**, a random-access memory (RAM) **818**, and an input/output (I/O) circuit **820**, all of which are interconnected via an address/data bus **822**. In some embodiments, the controller **806** may also include, or otherwise be communicatively connected to, a database **824** or other data storage mechanism (e.g., one or more hard disk drives, optical storage drives, solid state storage devices, etc.). The database **824** may include data such as customer web profiles, product data, web page templates and/or web pages, and other data necessary to interact with the user **892** through the network **830**. As discussed with reference to the controllers **855** and **870**, it should be appreciated that although FIG. **8**D depicts only one microprocessor **816**, the controller **224** may include multiple microprocessors **816**. Similarly, the memory of the controller **806** may include multiple RAMs **818** and multiple program memories **808**. Although the FIG. **8**D depicts the I/O circuit **820** as a single block, the I/O circuit **820** may

include a number of different types of I/O circuits. The controller **806** may implement the RAM(s) **818** and the program memories **808** as semiconductor memories, magnetically readable memories, and/or optically readable memories, for example.

In addition to being connected through the network **830** to the user devices **833** and **1694**, as depicted in FIG. **8**C, FIG. **8**D illustrates that the web server **890** may also be connected through the network **830** to the central processing system **840** and/or one or more facility servers **826**. As described below, connection to the central processing system **840** and/or to the one or more facility servers **826** facilitates the platform **800**.

The program memory **808** and/or the RAM **818** may store various applications for execution by the processing circuitry **816**. For example, an application **832** may provide a user interface to the server, which user interface may, for example, allow a network administrator to configure, troubleshoot, or test various aspects of the server's operation, or otherwise to access information thereon. A server application **834** operates to populate and transmit web pages to the web-enabled devices **894**, receive information from the user **892** transmitted back to the server **890**, and forward appropriate data to the central processing system **840** and the facility servers **826**, as described below. Like the software **871**, the server application **834** may be a single module **834** or a number of modules **834***a*, **834***b*. While the server application **834** is depicted in FIG. **8**D as including two modules, **834***a* and **834***b*, the server application **834** may include any number of modules accomplishing tasks related to implantation of the web server **890**. By way of example, the module **834***a* may populate and transmit the web pages and/or may receive and evaluate inputs from the user **892** to facilitate in the wireless transfer of data from a first tablet to a second tablet, while the module **834***b* may communicate with one or more of the back end components to provide the requested data.

Typically, a user may launch or instantiate a user interface application (e.g., a web browser or other client application) from a web-enabled device, such as the web-enabled devices **833** and **894**, to access the web server **890** cooperating with the system **840** to implement the platform **800**.

One or more processors can be utilized to implement any functions and/or algorithms described herein, unless explicitly stated otherwise. Additionally, any functions and/or algorithms described herein, unless explicitly stated otherwise, can be performed upon virtual processing circuitry (e.g., one or more virtual processors, for example on one or more physical computing systems such as a computer farm or a cloud drive).

Reference has been made to flowchart illustrations and block diagrams of methods, systems and computer program products according to implementations of this disclosure. Aspects thereof are implemented by computer program instructions. These computer program instructions may be provided to processing circuitry of a general purpose computer, special purpose computer, or other programmable data processing apparatus to produce a machine, such that the instructions, which execute via the processing circuitry of the computer or other programmable data processing apparatus, create means for implementing the functions/acts specified in the flowchart and/or block diagram block or blocks.

These computer program instructions may also be stored in a computer-readable medium that can direct a computer or other programmable data processing apparatus to function in a particular manner, such that the instructions stored in the computer-readable medium produce an article of manufacture including instruction means which implement the function/act specified in the flowchart and/or block diagram block or blocks.

A number of implementations have been described. Nevertheless, it will be understood that various modifications may be made without departing from the spirit and scope of this disclosure. For example, preferable results may be achieved if the steps of the disclosed techniques were performed in a different sequence, if components in the disclosed systems were combined in a different manner, or if the components were replaced or supplemented by other components. The functions, processes and algorithms described herein may be performed in hardware or software executed by hardware, including computer processing circuitry (e.g., processors and/or programmable circuits) configured to execute program code and/or computer instructions to execute the functions, processes and algorithms described herein. Additionally, some implementations may be performed on modules or hardware not identical to those described. Accordingly, other implementations are within the scope that may be claimed.

The invention claimed is:

1. A system comprising:

processing circuitry; and

a non-transitory computer readable memory coupled to the processing circuitry, the memory storing machine-executable instructions, wherein the machine-executable instructions, when executed on the processing circuitry, cause the processing circuitry to:

receive, from a remote computing device of a user via a network, identification of at least one of a customer, a market, a product, and a geographic region for a new negotiation;

identify, based upon the at least one of the customer, the market, the product, and the geographic region, a plurality of recommended template parameters;

provide, in a user interface configured for display on a remote computing device, a quote customization user interface prioritizing presentation of the plurality of recommended template parameters;

receive, from the remote computing device responsive to providing the quote customization user interface, a plurality of quote template fields selected by the user of the remote computing device;

associate, within a non-transitory storage medium, the quote template fields with the at least one of the customer, the market, the product, and the geographic region;

provide, in a second user interface configured for display on the remote computing device, a quote request template user interface comprising the plurality of quote template fields, wherein at least a portion of the quote template fields are editable by the user;

receive, from the remote computing device responsive to providing the quote request template user interface, a plurality of quote request template parameter settings, wherein the plurality of quote request template parameter settings include one or more indications of a corresponding field being editable by a second party to the new negotiation; and

cause presentation, in real time responsive to receiving the plurality of quote request template parameter settings, of a quote request available notification on at least one remote vendor computing device associated with each vendor of at least one vendor,

wherein the quote request available notification presents, upon each remote vendor computing device of the at least one vendor, data corresponding to at least a portion of the quote request template parameter settings.

2. The system of claim **1**, wherein the quote request available notification is configured, upon activation, to present upon each remote vendor computing device of the at least vendor, a respective interactive graphic display for quote consideration.

3. The system of claim **1**, wherein the machine-executable instructions, when executed on the processing circuitry, further cause the processing circuitry to receive, from the remote computing device responsive to providing the quote customization user interface, identification of at least one document associated with the new negotiation.

4. The system of claim **1**, wherein the machine-executable instructions, when executed on the processing circuitry, further cause the processing circuitry to store, in a non-transitory database storage region, an audit trail relating to the new negotiation.

5. The system of claim **1**, wherein the machine-executable instructions, when executed on the processing circuitry, further cause the processing circuitry to, prior to causing presentation of the quote request available notification:

identify, based at least in part upon at least one of the customer, the market, the product, and the geographic region, a plurality of recommended vendors; and

present, in real time in the user interface configured for display on the remote computing device, an interactive graphic display of the plurality of recommended vendors for selection of the at least one vendor.

6. The system of claim **1**, wherein prioritizing presentation of the plurality of recommended template parameters comprises presenting, in a selected template parameters region of the quote customization user interface, the plurality of recommended template parameters.

7. The system of claim **1**, wherein:

receiving the plurality of quote template fields selected by the user comprises receiving a name for a customized template; and

the machine-executable instructions, when executed by the processing circuitry, further cause the processing circuitry to store, within a non-transitory computer readable medium, the plurality of quote template fields as a customized template of the name.

8. A method comprising:

receiving, via a network from a remote computing device, a request for a quote for a product;

providing, in a user interface configured for display on the remote computing device, a quote request template;

receiving, from the remote computing device responsive to providing the quote request template, a plurality of quote request template parameter settings, wherein the plurality of quote request template parameter settings include one or more indications of a respective corresponding field being editable by a third party to a negotiation regarding the quote;

accessing, by processing circuitry, quote template data related to a plurality of completed transactions;

identifying, by processing circuitry based upon at least a subset of the plurality of quote request template parameter settings and at least a portion of the plurality of completed transactions, a plurality of vendors;

providing, in real time in a user interface configured for display on the remote computing device, an interactive graphic display of the plurality of vendors for selection;

receiving, from the remote computing device responsive to providing the interactive graphic display, an indication of selection of at least one vendor of the plurality of vendors; and

providing, in real time responsive to the indication of selection, a quote request available notification to at least one remote vendor computing device associated with each vendor of the at least one vendor, wherein the quote request available notification is configured, upon activation, to present upon each remote vendor computing device of the at least one vendor a respective interactive graphic display for quote consideration, wherein

the interactive graphic display includes data corresponding to at least a portion of the quote request template parameter settings.

9. The method of claim **8**, further comprising receiving, from a first remote vendor computing device of the at least one remote vendor computing device associated with a first vendor of the at least one vendor, customized quote details relating to the provided quote request, wherein at least a portion of the customized quote details correspond to a field identified by the user as editable.

10. The method of claim **9**, wherein the customized quote details include data corresponding to one or more template parameter settings of the portion of the quote request template parameter settings.

11. The method of claim **10**, wherein receiving the plurality of quote request template parameter settings comprises receiving, associated with the one or more template parameter settings of the portion of the quote request template parameter settings, an indication that the corresponding quote request template parameter setting is third party editable.

12. The method of claim **9**, further comprising providing, to the remote computing device in real time responsive to receiving the customized quote details, a quote available notification.

13. The method of claim **9**, further comprising storing, in a non-transitory computer readable database an audit trail relating to a negotiation transaction comprising the quote request and the customized quote details.

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